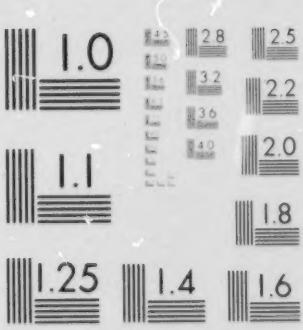


MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

DOCUMENT RESUME

ED 110 676 CE 004 466

AUTHOR	Barger, Clarence G.
TITLE	Driver Education for New York City High Schools: Curriculum Bulletin: 1973-1974 Series, No. 4.
INSTITUTION	New York City Board of Education, Brooklyn, N.Y. Bureau of Curriculum Development.
PUB DATE	74
NOTE	175p.; Pages 124 through 136 of official New York State forms will reproduce poorly
AVAILABLE FROM	Board of Education of the City of New York, Publications Sales Office, 110 Livingston Street, Brooklyn, New York 11201 ($7.00)
EDRS PRICE	MF-$0.76 Plus Postage. HC Not Available from EDRS.
DESCRIPTORS	Adult Education Programs; *Curriculum Guides; *Driver Education; Educational Equipment; Equipment Maintenance; Equipment Utilization; Evaluation Methods; *Instructional Materials; Program Development; Resource Guides; Scheduling; Secondary Education; State Standards; Summer Schools; Teacher Qualifications; Teaching Methods
IDENTIFIERS	New York (New York)

ABSTRACT

The New York City revised curriculum bulletin is designed to offer maximum assistance (1) to high school administrators to plan and establish a State-approved driver education program and (2) to instructors who will teach in such programs. Chapter 1, on organizing driver education programs, discusses in detail the types of instruction in day secondary schools, qualifications for instructors, establishing a driver education program, practice driving equipment, evaluation, other driver education programs, and scheduling. Chapter 2, on teaching driver education, discusses in detail classroom teaching and practice driving instruction; provides instructional guides for 23 units (each unit presents the topic, recommended time, objectives, a synopsis, a list of teaching highlights, and a list of student activities); lists 23 practice driving instructional guides specifying instructional areas, teacher orientation, and student objectives; discusses teaching with simulators; and gives suggestions for motorcycle and motor bike driver education. The 10 appendixes contain information on the New York State Motor Vehicle and Traffic Laws; New York City traffic regulations; a glossary; samples of official New York State forms; a list of teaching, safety, and test equipment dealers; additional resources; and a list of sources of driver education films and filmstrips with corresponding code numbers. (Author/BP)

ED110676

CURRICULUM BULLETIN • 1973-1974 Series • No. 4

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

"PERMISSION TO REPRODUCE THIS COPYRIGHTED MATERIAL BY MICROFICHE ONLY HAS BEEN GRANTED BY

NYC Bd. of Ed.

TO ERIC AND ORGANIZATIONS OPERATING UNDER AGREEMENTS WITH THE NATIONAL INSTITUTE OF EDUCATION. FURTHER REPRODUCTION OUTSIDE THE ERIC SYSTEM REQUIRES PERMISSION OF THE COPYRIGHT OWNER."

DRIVER EDUCATION

for NEW YORK CITY HIGH SCHOOLS

CE 004 466

BUREAU OF CURRICULUM DEVELOPMENT
BOARD OF EDUCATION • CITY OF NEW YORK

Permission to reproduce this copyrighted work has been granted to the Educational Resources Information Center (ERIC) and to the organization operating under contract with the U.S. Office of Education to reproduce documents included in the ERIC system by means of microfiche only, but this right is not conferred to any users of the microfiche received from the ERIC Document Reproduction Service. Further reproduction of any part requires permission of the Board of Education of the City of New York.

New York City public schools should order additional copies of this publication from the Bureau of Supplies.
ISBN No. 88315-419-6 Publications List No. 00-1300-40

Copies of this publication may be purchased by outside agencies from: Board of Education of the City of New York, Publications Sales Office, 110 Livingston Street, Brooklyn, N.Y. 11201. Checks should be made payable to: Auditor, Board of Education. Price: $7.00

C-334

3/4

BOARD OF EDUCATION

SEYMOUR P. LACHMAN, *President*

JAMES F. REGAN, *Vice-President*

JOSEPH G. BARKAN

JOSEPH MONSERRAT

ISAIAH E. ROBINSON

Chancellor

IRVING ANKER

Deputy Chancellor

BERNARD R. GIFFORD

Executive Directors

EDYTHE J. GAINES
EDUCATIONAL PLANNING AND SUPPORT

SAMUEL POLATNICK
OFFICE OF HIGH SCHOOLS

ALFREDO MATHEW JR.
COMMUNITY SCHOOL DISTRICT AFFAIRS

FRANK C. ARRICALE
PERSONNEL

HELEN M. FEULNER
SPECIAL EDUCATION AND PUPIL PERSONNEL SERVICES

COPYRIGHT 1974
BY THE BOARD OF EDUCATION OF THE CITY OF NEW YORK

Application for permission to reprint any section of this material should be made to the Chancellor, 110 Livingston Street, Brooklyn, N.Y. 11201. Reprint of any section of this material shall carry the line, "Reprinted from (title of publication) by permission of the Board of Education of the City of New York."

Foreword

This curriculum bulletin, *Driver Education for New York City High Schools*, is a revision of an original curriculum guide written in 1968 and tried in selected schools over a period of several years.

Like the original bulletin, this guide has been developed especially for New York City high schools. Its content offers maximum assistance to high school administrators who plan to establish a State-approved Driver Education program, as well as to instructors who will teach in such programs.

The guide contains information necessary for organizing a Driver Education program: teacher certification, procedures for obtaining course approval, mandated requirements, and instructional guides for both classroom and laboratory. A supplementary section makes suggestions for the teaching of safe motorcycle operation.

The appendix contains pertinent information on the New York State Motor Vehicle and Traffic Law, New York City traffic regulations, curriculum guides and textbooks, visual aid and equipment sources, a glossary, and a bibliography.

SEELIG LESTER
Deputy Superintendent

Acknowledgments

This bulletin, *Driver Education for New York City High Schools,* has been developed as a project of the Bureau of Curriculum Development, Leonard Simon, Acting Assistant Director. Seelig Lester, Deputy Superintendent of Schools, provided overall supervision of the project.

Clarence G. Barger, Curriculum Specialist for Driver Education Programs, wrote this bulletin and developed the scope and sequence and experimental materials. Daniel A. Salmon, then Acting Assistant Director, gave direct supervision and served as editor and coordinator of the project.

Acknowledgment is made to the following individuals and agencies for their assistance in supplying materials and illustrations, and for permission to include such material:

The American Automobile Association for permission to reproduce the AAA Agreement for Use of Dual Control Car.

Leon Brody, Director of Publications, Center for Safety, New York University, for permission to reproduce the Siebrecht Attitude Scale and the McGlade Road Test.

Vincent L. Tofany, Commissioner of Motor Vehicles, for permission to reproduce illustrations and samples of official road test forms.

R. W. Elliott, Manager of Agencies, Universal Underwriter Insurance Company, Kansas City, Missouri, for permission to use the illustration of the Motorcycle Practice Area and for the use of the material in Universal Underwriter Motorbike Driver Education Program which formed the basis for the supplementary section on motorcycle driver education.

James C. Eadie, New York State Education Department, for permission to reprint material from *Policies and Conduct of Driver Education Courses;* also for his very valuable answers to questions during the writing of this curriculum guide.

Further acknowledgment is made for the valuable suggestions, comments, and constructive criticism provided the revised version of this guide by the following:

J. Duke Elkow, Professor of Safety, Center for Safety, New York University, New York, N.Y. 10003

Harold Leibowitz, Asst. Professor, Department of Health and Physical Education, Brooklyn College, Brooklyn, N.Y. 11210

Dean R. Cook, Administrator, Driver Education Services, Aetna Life & Casualty, Hartford, Conn. 06115

Ed Williamson, Director of Health, Physical Education and Driver Education, Department of Education, Tallahassee, Fla.

James E. Aaron, Coordinator, Safety Center, Southern Illinois University, Carbondale, Ill.

David R. Jacobson, Consultant, Driver and Safety Education, State Department of Education, Hartford, Conn. 06115

A. E. Florio, Professor of Safety Education, University of Illinois, Champaign, Ill. 61820

Edward W. Bonessi, Chairman, Traffic and Safety Education Department, Southern Connecticut State College, New Haven, Conn.

Earl Allgaier, Consultant, Research and Development, American Automobile Association, Washington, D.C.

Richard J. Ochart, Automobile Club of New York, 28 E. 78 St., New York, N.Y. 10021

William G. Anderson, Assoc. Professor of Education, Teachers College, Columbia University, New York, N.Y. 10027

John S. Urlaub, Curriculum Associate, Berkeley High School, 2246 Milvia St., Berkeley, Calif. 94704

Lonnie Gilliland, Director, Safety Education, Oklahoma City Public Schools, Oklahoma City, Okla.

Joseph M. Nelson, Specialist, Driver Education, Oregon Board of Education, Salem, Oreg. 97310

The Bureau for Curriculum Development, Edythe K. Kahn, Editor, supervised printing production. Lillian B. Amdur edited the manuscript, and Joseph Feld was responsible for the layout and the cover.

Contents

FOREWORD

CHAPTER 1. ORGANIZING DRIVER EDUCATION PROGRAMS 1

Types of Instruction in Day Secondary Schools 1

Qualifications for Instructors 5

Establishing A Driver Education Program 8

The Driver Education Classroom 11

Practice Driving Equipment 17

Evaluation 26

Other Driver Education Programs 33

Scheduling 36

CHAPTER 2. TEACHING DRIVER EDUCATION 47

Classroom Teaching 49

Instructional Guides 54

Practice Driving Instruction 82

Practice Driving Instructional Guides 84

Teaching with Simulators 105

Motorcycles or Motorbike Driver Education 107

APPENDIX 115

Glossary 116

Official New York State Forms 124

New York State Guidelines—Drivers Education For Adults 132

Excerpts From The New York State Pre-Licensing Classroom Driver Training and Highway Safety Instruction Law 135

Digest of Pertinent Sections: New York State Motor Vehicle and Traffic Law 149

Excerpts: New York State Motor Vehicle and Traffic Law 155

Excerpts: New York City Traffic Regulations 157

Teaching, Safety and Test Equipment 161

Resources 165

Sources For Films and Filmstrips 167

CHAPTER 1

Organizing Driver Education Programs

Types of Instruction in Day Secondary Schools

The minimum standards approved by the Board of Education of New York City for Driver Education shall be, *at least*, the equivalent of those standards approved by the New York State Education Department for Driver Education throughout the state.

A Driver Education course which meets the standards approved by the New York State Education Department must consist of two related parts given concurrently.

CLASSROOM INSTRUCTION

A discipline encompassing all phases of the theory of driving an automobile. This part of the course, taught in the classroom, emphasizes the development of proper attitudes, concepts of the responsibilities of the driver, his physical characteristics and their importance to good driving, basic knowledge of the construction and operation of the automobile, knowledge of pertinent local, state, and national traffic rules and regulations, the theory of city, rural, and expressway driving, the techniques of driving under adverse conditions, basic responses to emergency situations, trends in highway safety engineering, and consumer education concerning the ownership, maintenance, and use of the automobile, including a discussion of automobile pollution and pollution-control techniques. This phase of the course must be allowed a minimum of thirty-six periods of 40 minutes each (2 periods per week for 18 weeks for one semester, or one period per week for 36 weeks for one year), exclusive of registration and final examination. Educational television may be used in part to meet the time requirement for classroom instruction.

The Driver Education course should have a regular place in the high school curriculum and should be given only to those students whose programs will allow its inclusion into their daily schedule without interference with required subjects. The maximum allowable number of students per class is thirty-six.

LABORATORY INSTRUCTION

A unit of on-the-road instruction which shall consist of a minimum of 36 periods of 40 minutes each (2 periods per week for 18 weeks in one semester, or one period per week for 36 weeks in one year). No more than four students are permitted in the Driver Education car with the instructor in any one period. During a period, each student will receive, on the public streets and highways, ten minutes of actual behind-the-wheel-practice, and thirty minutes of observation.

An off-street multiple car driving range may be used for a part of the behind-the-wheel instruction program if special approval has first been obtained from the State Education Department. No more than 50 percent of behind-the-wheel instruction time may be used for this method, with a *maximum* of two pupils per vehicle. A *minimum* of 18 periods of behind-the-wheel instruction and practice *must* be given on the public street with a maximum of 4 pupils and the instructor in the car.

Simulators may be used as a part of the practice driving program with special approval from the State Education Department. Driving simulators may be accepted in the ratio of 40 minutes of simulator instruction to 10 minutes of on-street, behind-the-wheel practice driving. To meet the standards of the State Education Department, no more than 18 periods of simulation practice is permitted. A minimum of 18 periods of behind-the-wheel practice driving in a dual-control car, 4 pupils and the instructor, must supplement simulator instruction.

In a laboratory instruction program consisting of a combination of simulator, off-street driving range, and on-the-road instruction, a minimum of 18 periods must be spent in on-the-road instruction with the instructor. The remainder of the practice time may be divided between simulator and off-street driving-range instruction. It is strongly recommended that a complete Driver Education program be given in a semester, rather than in a full school year, because the elapsed time between lessons is shorter and makes for better retention of learned skills.

Pupils who satisfactorily complete a comprehensive program of Driver Education (classroom theory and on-the-road practice), which meets or exceeds the minimum standards approved by the State Education Department (36 periods of classroom and 36 periods of practice), and which has been given formal approval by the State Education Depart-

ment and the Commissioner of Motor Vehicles, will receive ½ unit of credit, and the MV285 Course Completion Certificate. Credit may not be given for a Driver Education program which provides classroom instruction only, or for a combined program which does not meet the minimum approved standards of the State Education Department, or one that has been taught by an uncertified instructor.

A public or nonpublic school Driver Education program must not begin before 7 A.M. or extend after 5 P.M. EST, nor can a public school program be conducted on legal holidays. Any deviations from State-approved standards must have special approval from the State Education Department before being instituted.

Qualifications for Instructions

ELIGIBILITY REQUIREMENTS

Teachers planning to qualify as State-approved instructors of Driver Education must meet the following requirements before receiving their MV283 certificate to teach driving.

1. Hold *secondary school certification* from the New York State Education Department.
2. Hold a currently valid driver's license.
3. Have at least two years of driving experience in any state of the United States.
4. Have an acceptable driving record as determined by the Department of Motor Vehicles.
5. Present evidence of having satisfactorily completed a registered minimum 4-credit hour preservice teacher preparation program entitled Driver and Traffic Safety Education within the 3 years immediately preceding application.

Upon completing the 4-credit hour course and meeting all other requirements, the applicant should submit a request for an application form—Form 2 (see Appendix) to Director, Safety Education Unit,

Division of General Education, State Education Department, Albany, New York 12224.

After the application forms (2 copies) have been completed and signed by the school principal or superintendent, they should be returned to the foregoing address. Note that two copies of Form 2 must be filed for each applicant seeking State approval.

When an applicant becomes State-approved, his MV283 certificate has statewide validity. Applications for instructor approval or for course approval should be submitted at least 3 weeks before instruction begins to allow time for credentials to be examined and reviewed.

School principals, contemplating the institution of a Driver Education program in schools which have not heretofore conducted one, should make certain that all teachers have MV283 approval for teaching in public schools. Teachers who have MV283 approval for teaching in *private* schools will find such approval invalid for public schools and will have to reapply for public school certification. The following excerpt from a letter from Dr. James C. Eadie, Director, Division of General Education State Education Department will clarify this point.

> "In order to teach in a public school, a candidate must have a valid secondary school license. In the case of New York City, the Department recognizes the license issued by the Board of Education of the City of New York. In the case of a private school, no such license or certification is required. Therefore, if a teacher in a private school is permitted to teach driver education, he is permitted only to teach in that school—hence the "Private Schools Only" approval. The preparation to teach driver education, however, is the same for both private and public schools."

TEACHER PREPARATION PROGRAM

The teacher preparation program for certification of driver education teachers can be offered only by recognized teacher preparation institutions which are approved by the State Education Department as meeting the minimal criteria for: (1) faculty personnel and qualifications; (2) instructional facilities; (3) course content. Following is a list of colleges and universities in New York State which offer State-approved courses in Driver Education:

New York University, Center for Safety, New York City
Columbia University, Teachers College, New York City
Brooklyn College, Brooklyn, New York
State University College at Albany, New York
State University College at Buffalo, New York
State University College at Cortland, New York
State University College at Oswego, New York
Ithaca College, Ithaca, New York

Driver Education courses offered at the Center for Safety, New York University, are at the graduate level; however, advanced undergraduate students may enroll in graduate Driver Education courses with special permission. Courses are offered at Columbia University on the graduate level only. At Brooklyn College the basic Driver Education course is offered at the undergraduate level, while the advanced course is offered at the graduate level only.

Reciprocity Agreements with Neighboring States

Certain neighboring states have certification reciprocity with the New York State Education Department. The following excerpt, taken from the State Education Department manual, *Teacher Education Programs and Certification Policies, 1967 edition,* explains this more fully:

> "*Eight-State Reciprocity Compact* (All Professional Positions) New York State has participated in the Eight-State Reciprocity Compact since 1949. The states included in this compact are: New Jersey, Maine, New Hampshire, Connecticut, Vermont, New York, and Rhode Island. (Massachusetts attends meetings, *but is not included in present reciprocity agreements.*) This compact makes it possible for a person to be certified in New York State if he meets all the following conditions:

1. Has preparation equivalent in length, although not necessarily in content, to that required in New York State.
2. Holds a certificate valid in one of the member states to teach the subject for which he desires certification in New York State.
3. Has three years of satisfactory experience in teaching the subject in the member state in which he holds a certificate.

To obtain New York State certification under the Eight-State Reciprocity Compact, the candidate must submit an application for certification to the Division of Teacher Education and Certification. The Division then corresponds with the certifying officer of the originating member state. Upon verification from the originating state, the Division then issues the appropriate New York State certificate."

Thus, if a teacher holds an out-of-state certification in Driver Education from one of the member states, and can fulfill *all* the foregoing requirements, he can obtain certification to teach Driver Education in New York State by applying to the State Education Department without having to complete certification courses in New York State.

Establishing A Driver Education Program

When a Driver Education Program is to be established in a school for the first time, the following procedure must be followed:

COURSE APPROVAL

An Application for Course Approval (see Appendix, Form 1) must be completed and forwarded to the State Education Department at least three weeks before the program is started. On this form will be listed the names and MV283 Certificate numbers of all prospective instructors. The MV283 approval must be for *public schools,* not private schools. Other pertinent information which includes the number of hours of instruction, number of students, etc., must be entered, and in addition, a complete program schedule for the semester or year, whichever applies, showing distribution of students and all individual teachers' schedules.

INSTRUCTOR APPROVAL

Application for MV283 approval (Appendix, Form 2), for those instructors not yet approved for public high school instruction, must be completed for each instructor and forwarded with the application for course approval to the State Education Department.

STUDENT SELECTION

It is recommended that the following criteria be used in selecting students for participation in the program:

a. Age: student must reach the age of 17 before the calendar date of the end of the course.

b. Students selected should be in 12th year in high school (senior year).

c. Students in vocational courses in the following areas should be given preference: Automobile Mechanics; Air Conditioning and Heating; Refrigeration; Plumbing; Radio and Television Servicing, any other service industry requiring the use of an automobile.

d. Students selected should be physically capable of driving and be able to meet minimum physical standards of the Motor Vehicle Department.

e. Students selected should be mentally and emotionally stable.

f. If facilities are limited, students might be selected on the basis of academic standing and achievement.

g. Students without driving licenses should be selected in preference to those holding licenses. Later, if openings exist, students with licenses might be placed in the program on the basis of need.

h. Parental approval must be secured in all cases.

ARRANGING THE SCHEDULE

Since both classroom theory and laboratory instruction must be given concurrently, and since both phases of the program must meet the minimum standards of the State Education Department, the schedule must be planned carefully.

It is most desirable that both phases of Driver Education have a regular place in the school curriculum and that the entire course be supervised by one individual with an adequate practical Driver Education background. In some schools, this may not be possible due to the limitations of the school program as a whole. In such cases, the laboratory instruction may be given during study periods or before and after regular school hours, i.e., from 7 A.M. to 8 A.M. and from 3 P.M. to 5 P.M. In such cases, the instructors' teacher schedules may be adjusted to fit these variations of scheduling. Scheduling will be discussed in detail in another section.

SOURCES OF DUAL-CONTROL CARS (See page 18.)

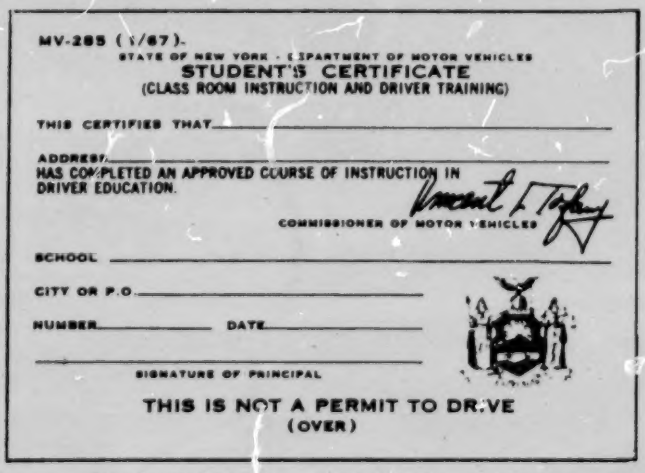
INSURING CARS (See page 20.)

MAINTENANCE OF CARS (See page 21.)

STIPULATIONS OF THE DEPARTMENT OF MOTOR VEHICLES

Since a State-approved Driver Education Program must meet the requirements of both the State Education Department and the Department of Motor Vehicles, certain provisions of the New York State Vehicle and Traffic Law must be explained at this point. The first of these is information regarding the issuance of the learner's permit.

In New York City, junior operator's licenses are not valid, and similarly neither is the learner's permit issued to an applicant under 18 years of age. Because of this, a learner *under 18* can practice legally in New York City *only* while enrolled in an approved high school Driver Education course, and *only while in the school car.* This may be done without a learner's permit. Those learners 18 years old or over are governed by the usual regulations, except that they, too, do not need a permit while learning to drive in the school car.



MV-285 (1/67)

STATE OF NEW YORK - DEPARTMENT OF MOTOR VEHICLES

STUDENT'S CERTIFICATE

(CLASS ROOM INSTRUCTION AND DRIVER TRAINING)

THIS CERTIFIES THAT _____

ADDRESS _____

HAS COMPLETED AN APPROVED COURSE OF INSTRUCTION IN DRIVER EDUCATION.

COMMISSIONER OF MOTOR VEHICLES

SCHOOL _____

CITY OR P.O. _____

NUMBER _____ DATE _____

_____

SIGNATURE OF PRINCIPAL

THIS IS NOT A PERMIT TO DRIVE

(OVER)

Fig. 1. MV 285 Course Completion Certificate

The second provision deals with rules regarding the issuance and use of the MV285 Course Completion Certificate. This certificate is issued to every student who satisfactorily completes a State-approved high school Driver Education course (see Fig. 1).

The MV285 Certificate *may not* be used by the student to whom it is issued until he reaches his seventeenth birthday. It may be used only by the individual to whom it is issued, and it must be used within two years of the date of issuance. This certificate provides the following benefits to its holder:

It eliminates the written test when the holder presents it with his license application.

It allows a 17-year-old holder to obtain a senior operator's license which may be used legally anywhere in the state.

The MV285 Certificate is used in the following manner: When the holder applies for his license, he surrenders the certificate to the Motor Vehicle Department along with his application. If he fails his road test, the MV285 Certificate is returned to him with his notice of failure so that he may submit it again with his next application for a license.

There are certain limitations to the use of the MV285 Certificate which must be observed by the holder. The certificate is not a permit and cannot be used as such when practicing driving. Furthermore, it is not a license, and cannot be used as a substitute for one.

Schools issuing the MV285 Certificates should be careful to type the student's name exactly as it appears on the proof of age submitted by the student and should also make no typographical errors since any erasure automatically voids the certificate.

The Driver Education Classroom

Since methods of instruction in Driver Education should include lecture, student participation and discussion, demonstration, use of cutaway models, psychophysical testing devices, and films and other visual aids, a school must have sufficient space to locate the various instructional aids to optimum advantage.

The dimensions of the classroom should be such that, in addition to being large enough to accommodate the required number of student tables and seats, there should be ample room for an automobile chassis, for stands holding cutaway models of automobile mechanical units, for a roomy demonstration table, for psychophysical test units strategically placed, and for storage cabinets. Sufficient wall space should be allowed for adequate board facilities as well as for a motion picture screen, a bulletin board, and magnetic traffic boards. Windows should be equipped with modern blackout shades so that movies may be shown without distraction caused by unwanted outside illumination.

In addition, it is recommended that air conditioning be a part of the physical equipment of the classroom to provide proper temperatures and ventilation for warm weather, since there might be insufficient ventilation when blackout shades are drawn.

An important adjunct of the classroom should be an office and workroom for the instructor, attached to the classroom. The workroom should be equipped with suitable facilities for storage of films, demonstration equipment, etc., as well as facilities for repairing films and other equipment. (Fig. 2)

If a simulator is to be installed in a school, the room for its use must have certain special characteristics. The floor should be constructed on an angle descending toward the screen, as in a motion picture theatre, to provide for maximum viewing for all simulator units. Likewise, all units must be located within an included angle of 42 degrees with the center of the screen as the vertex of the angle. The minimum distance between the screen and the front of the nearest simulator unit must be *13* feet. Each simulator unit should have sufficient space around it to allow for easy passage between units. Naturally, the number of units used in a given installation will largely be determined by the size of the room, but in most cases a multi-place installation of 15 units or more will require a room larger than a standard size classroom. (Fig. 3)

It is sometimes desirable to design a Driver Education Center, that is, a combination room of approximately 86′ x 30′ with a suitable partition dividing the classroom section from the simulator. This would allow a 40′ x 30′ room for the simulator, and a 38′ x 30′ classroom section. Thus both rooms could be used simultaneously in larger schools. (Fig. 4)

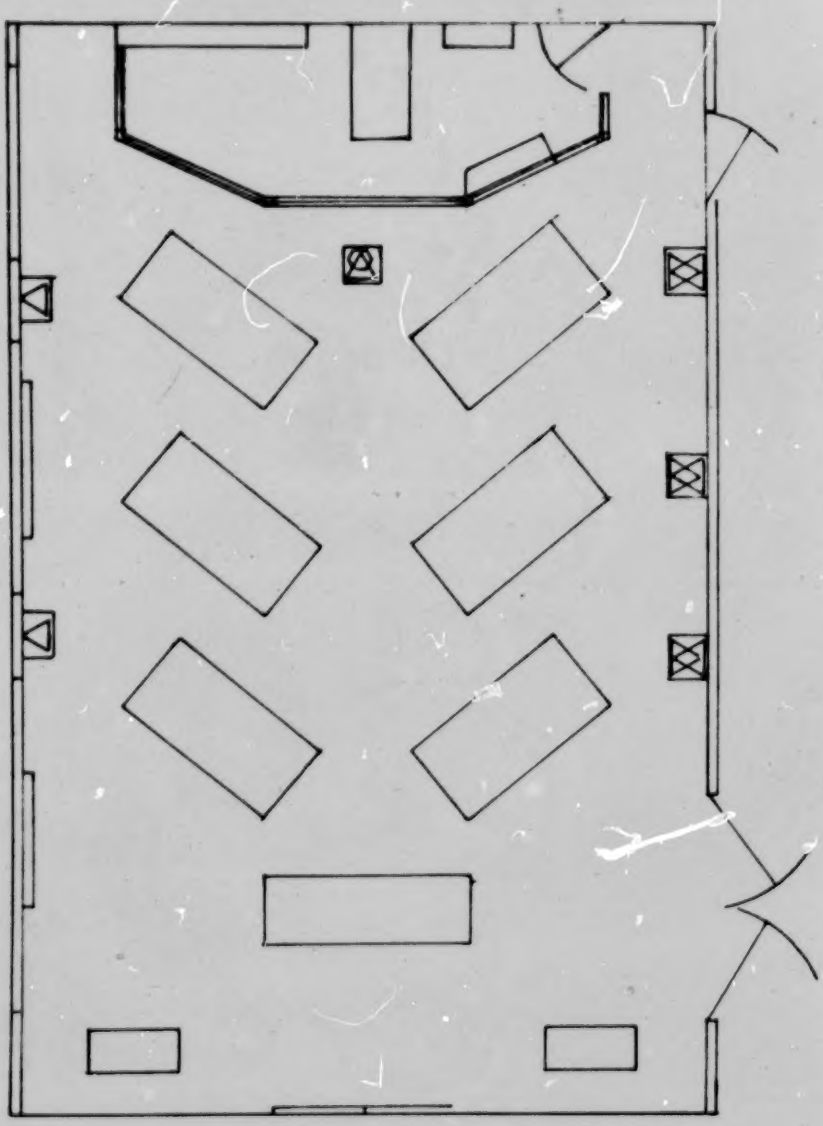


Fig. 2. Driver Education Classroom

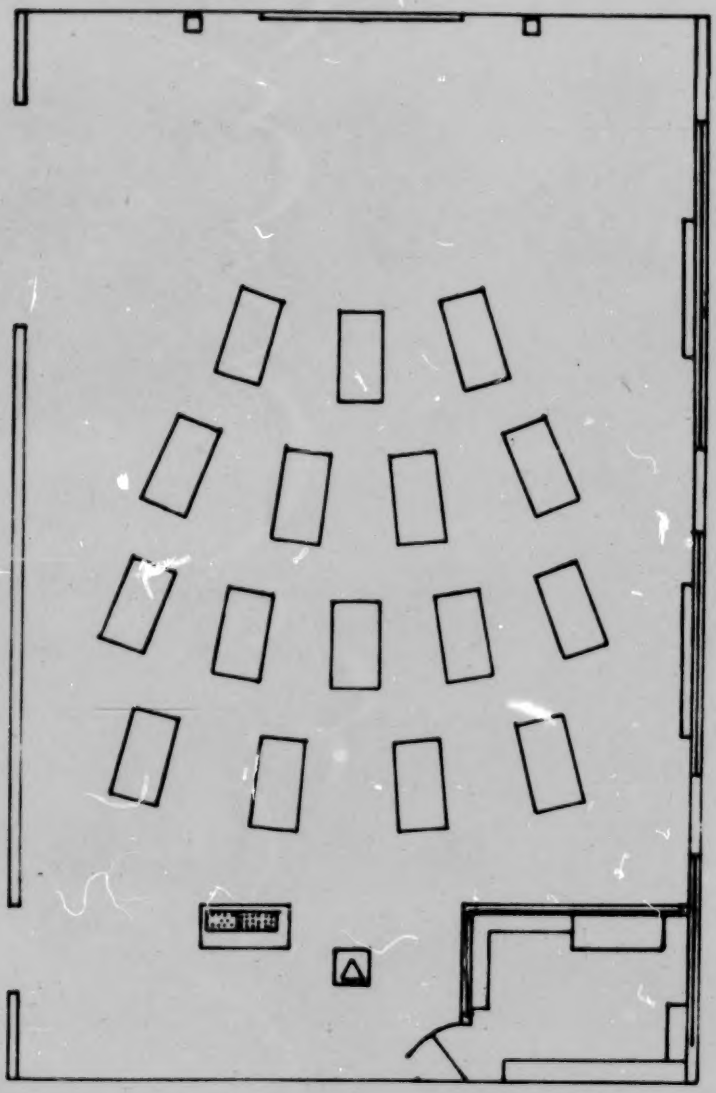


Fig. 3. Driver Education Simulator Classroom

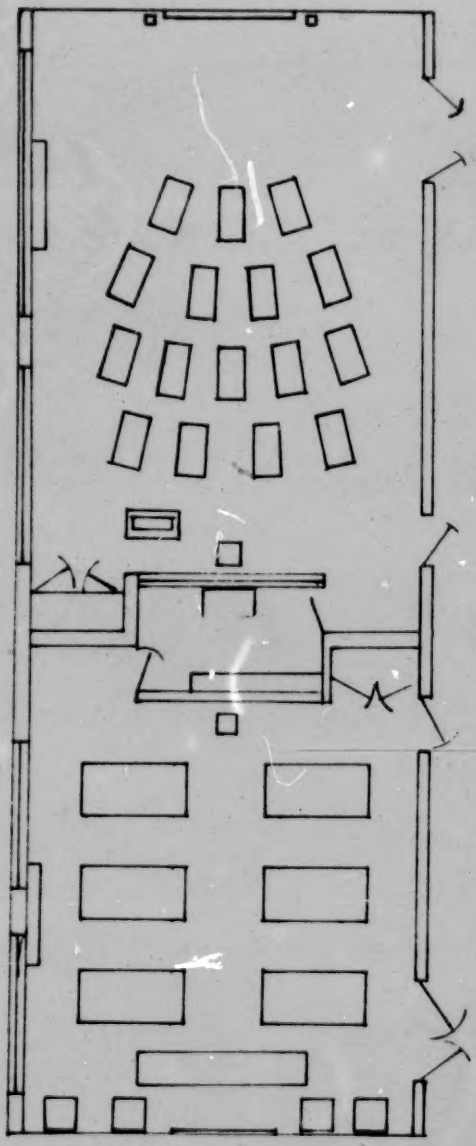


Fig. 4. Driver Education Center

INSTRUCTIONAL EQUIPMENT

Textbooks and Workbooks. A list of textbooks and workbooks in Driver Education approved by the Board of Education is found in the Appendix. It is strongly recommended that student workbooks be used in conjunction with an approved text to enrich student participation in the course. Standard tests are available for use with each textbook listed. One of the texts, *Tomorrow's Drivers*, includes a supply of standard tests with each order. Tests for the other texts cost a nominal fee. In addition, various attitude tests are available.

Other Classroom Equipment. If possible, include an automobile chassis (or a model of one), working cutaway automobile units such as engine transmission, clutch, steering gear, brakes, rear axle, or basic models with modern pollution-control devices, available from AAA or other agencies, and a magnetic traffic board with accessories for use in demonstrating traffic problems.

In addition, the classroom equipment should include a motion picture projector, a slide or filmstrip projector, and a suitable screen. Films are easily available from BAVI, from safety agencies, or from various manufacturers. A list of film sources is included in the Appendix. If desired, many films may be purchased for permanent possession. Other classroom equipment might include an overhead projector with a complete set of transparencies and overlays especially designed for the Driver Education course. Finally, an up-to-date teaching machine system, such as the Aetna Drivocator, might be used to enrich the classroom part of the course.

PSYCHOPHYSICAL TESTING DEVICES

Optimum results are more easily obtained with the addition of equipment other than textbooks. A set of psychophysical testing devices, which provides tests in the following areas, is an important adjunct to the classroom course: peripheral vision test; depth perception test; visual acuity test; Ishihara test for color recognition; night vision test; glare recovery test; steadiness test; reaction time test. These devices are useful in providing both the student and the instructor with an index to capabilities and inadequacies in certain physical areas.

Practice Driving Equipment

DUAL-CONTROL CARS

An essential part of any State-approved Driver Education program is the automobiles used for practice driving. These automobiles should be standard 4-door sedans with the following equipment:

- Dual-control brake (If car is equipped with standard transmission, dual-control clutch is also necessary.)
- Cushioned instrument panel
- Cushioned sun visors
- Prismatic interior rear-view mirror
- Windshield washers
- Recessed center steering wheel
- Left and right exterior mirrors
- Backup lights
- Variable speed windshield wipers
- Emergency flasher system
- Five retractable seat belts
- Approved D.O.T. emission control devices

In addition to this equipment, where cars with automatic transmissions are used, it is strongly recommended that an ignition cutoff switch be installed as an added safety measure. This device, when used by the instructor in an emergency, insures a quick stop by preventing the automatic transmission from downshifting when the brake is applied.

All automobiles used for Driver Education must display adequate identification on rear and both sides of the vehicle as follows: "Driver Education—Name of School." If the cars are loaned by dealers, a courtesy line 2" high, with the dealer's name may be placed on the sides in addition to the "Driver Education" signs. These identification signs may be either bumper-mounted or decal on the rear, and decals on both sides. Many dealers are abandoning the bumper signs because of the difficulty of mounting them on modern bumpers and the danger of having a loose sign mar the finish of the car. In such cases, decals are satisfactory. Dealer policies as regards identification may vary. Some dealers furnish all identification to the school without cost,

while others insist that the school pay the cost of the identification. A similar variation in policy also applies to the dual-control. Some dealers require the school to buy and own the control which is transferred from new car to new car, while others furnish the control and retain possession of it while using a similar transfer process at the end of the year.

SOURCES OF DUAL-CONTROL CARS

Driver Education cars for public school programs may be obtained in one of several ways:

1. *Outright purchase.* Dealers are requested to submit bids for fully equipped Driver Education cars. In this method, no dealer identification is permitted on the cars. The only identification should be the name of the school and Driver Education. This method is probably the least satisfactory from several standpoints; the loss from depreciation is absorbed by the school, and since replacing cars yearly is very expensive, maintenance costs would mount with the increasing age of the cars. The only real advantage in this method is the availability of the automobile at the very beginning of the school year, thus eliminating delay in starting the program.
2. *Leasing.* Contracts are drawn between the school or Board of Education and a rental agency for the leasing of the required number of cars on a yearly basis. If a school system desires to use this method, it is very advisable to have a blanket contract which covers the rental of the properly equipped car, gas, oil, washing, maintenance, insurance, and the guarantee of immediate replacement of any vehicle needing major maintenance. This is also an expensive method of obtaining Driver Education cars. The advantage here is that such a contract guarantees an uninterrupted program and fully protects the educational system from liability.
3. *Dealer loan.* The large automobile manufacturing corporations, such as Chrysler, Ford, General Motors, and American Motors, encourage their dealers to make free loans of automobiles equipped for Driver Training to schools or school systems by giving the dealers special discounts for each car loaned. Sometimes the AAA acts as negotiator between the school and dealer, and sometimes, the contract is negotiated directly without a third party.

While a facsimile of a standard contract is shown in the Appendix, the essentials of the contract are these: The dealer agrees to lend the car

equipped with the necessary safety devices, to the school, usually for the school year (this clause may vary). The school agrees to use the car *only* for Driver Education, garage it, maintain it according to the provisions of the contract, allow the dealer's name to appear in letters of specified size on the car, and pay for any damage or undue repairs, other than normal wear and tear that may occur during its use by the school. The school also agrees to accept temporary ownership and provides adequate insurance to cover any damage or liability which might occur. Under these conditions registration plates are obtained from the Motor Vehicle Department without charge. In New York City, the car contracts are negotiated among the Board of Education (not the individual school), the dealer, and AAA. Signatures on the contract are the Secretary of the Board, an officer of the dealer's company, and an officer of AAA. Although the car is earmarked for a particular school, the principal does not sign. Contracts are in quadruplicate.

After the original set of contracts is negotiated for the school year period, or whatever variation of this is equitable to all interested parties, succeeding contract forms are mailed to the individual schools by AAA. The school then forwards all copies to the dealer for notarized signature. The dealer sends all contracts to the Secretary of the Board for notarized signature, and the Secretary returns all signed and notarized copies to AAA. After AAA signs and notarizes all copies, one copy of each contract is sent to the dealer, one to the school, one to the Board of Education, and one is retained by AAA. Where AAA is not a party involved, the contracts are in duplicate, and are signed by the dealer and the Board's representative.

REGISTERING CARS

School or Board of Education-owned automobiles may be registered with the Motor Vehicle Department and plates obtained at no charge because of school-system ownership (Sec. 410 M.V. & T. Law). The school or the Board of Education may also obtain registration and plates at no cost on dealer-loaned Driver Education cars provided the dealer transfers ownership (on a temporary basis for the duration of the contract) to the school or Board of Education.

Following are the steps necessary to register a Driver Education car:

1. Obtain a current registration form for each car, a certificate of title from the dealer, and an FS1 insurance form from the insurance broker or, if the self-insured method is used, an FH5 form from the

Motor Vehicle Department. *Note*: If it is impractical for the Board of Education officer to appear before the dealer to sign the MV50 certificate in his presence, an MV50.1 (waiver of signature) is sent along with the MV50 by the dealer. The MV50.1 may be signed later and does not have to be signed in the presence of the dealer.

2. Complete the registration form, the FH5 insurance form, and mail *all* forms to the Secretary of the Board, or to the Assistant Secretary for signature. Both the name of the school and the Board of Education should be filled in in the space provided for owner's name. Use the school address. It is not necessary to fill in the spaces on the registration form which ask for operator's license number or Social Security number. In the space provided for the name of the insurance company write: Self-insured. Leave policy number space blank. When forms are mailed to the Secretary for signature, enclose a letter requesting signed forms to be returned to school for further processing. The school then may mail all signed forms or send them via messenger to Motor Vehicle Department for plates, sticker, and registration stubs.

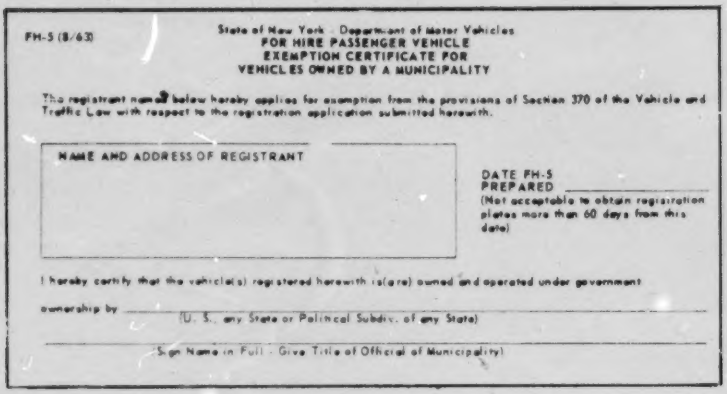
3. When plates are secured, they should be mounted on the car. Stub #1 should be separated from Stub #2 and placed in an envelope in the glove box of the car so that it may be shown on demand. Stub #2 should be kept in a safe place for use when registration is renewed.

INSURING CARS

Since *all* motor vehicles used on public highways must be protected under the Motor Vehicle Financial Security Act before being registered, there are choices which can be made by the school or the Board of Education. These are:

1. Purchasing a liability and property damage policy from a recognized insuring company which meets the minimum requirements of the provision of the Act. If the school or the Board of Education uses this method, however, it is strongly recommended that minimum requirements be ignored and that a policy be purchased which offers protection in the following areas and amounts: bodily injury liability —$100,000 to $300,000; property damage liability—$10,000; medical payments to passengers in school car—$5,000.

2. Self-insuring the cars. Under the provisions of Section 316 of Article 6, Motor Vehicle and Traffic Law, certain individuals or organizations may themselves assume financial responsibility for the automobiles. Up to the present time, this has been the policy of the New York City Board of Education. When this type of coverage is used, it is necessary to file a "Self-insured" form, FH5 (Fig. 5), along with the application for registration.



FH-5 (8/63)

State of New York - Department of Motor Vehicles
FOR HIRE PASSENGER VEHICLE
EXEMPTION CERTIFICATE FOR
VEHICLES OWNED BY A MUNICIPALITY

The registrant named below hereby applies for exemption from the provisions of Section 370 of the Vehicle and Traffic Law with respect to the registration application submitted herewith.

NAME AND ADDRESS OF REGISTRANT

DATE FH-5 PREPARED _____
(Not acceptable to obtain registration plates more than 60 days from this date)

I hereby certify that the vehicle(s) registered herewith is(are) owned and operated under government ownership by _____
(U. S., any State or Political Subdiv. of any State)

_____
Sign Name in Full - Give Title of Official of Municipality)

Fig. 5. FH 5 Insurance Exemption Form

MAINTENANCE OF CARS

Under the terms of the usual dealer-school contract, the school or Board of Education is required to give the car periodic routine maintenance. This includes refueling, adding or changing oil at specified intervals, washing the car and cleaning the interior, and attending to any minor faults that appear. It is suggested that, except in special cases where a car is located at a school equipped with the facilities and personnel trained to do this work, the car be returned to the dealer from whom it was obtained for all service except washing and refueling. Experience has shown that a more satisfactory relationship between dealer and school can be maintained under such an arrangement. Be sure that pollution-control devices are serviced regularly.

It is possible to enlist the aid of students to keep the car clean and to check the oil and fuel levels. This will give them an opportunity to learn a practical car maintenance lesson. Show pollution-control devices to students. Discuss their use and servicing.

In any event, keep a maintenance chart for the term or year for systematic maintenance records. The chart will serve as a reminder so that maintenance checks will not be overlooked and will act as a permanent record of care for the school. A sample maintenance chart will be found in the Appendix.

SIMULATORS

The driving simulator is a form of teaching machine which simulates most of the operations performed in a car, although no motion is produced. The simulator consists of two principal parts, the student trainer car (usually in sets of up to 30 units), and the master recorder or data processor. The two parts are connected by a wiring harness and are electrically operated. The student trainer cars are equipped with all the controls found on an automobile. When the controls are moved by the student, in response to the action shown on specially prepared motion picture films projected on a large screen of the front of the classroom, the movements are recorded in the master control unit so that the instructor is able to know which students are performing properly and which are making errors.

Simulators have several distinct advantages:

1. All students practice driving for the full 40-minute period instead of ten minutes each as in on-the-road practice.
2. Through their use, more students can be trained than by the conventional 4-in-a car method in the same amount of time, thus reducing program costs.
3. They can provide repetitive drill in basic driving skills without exposing students to the hazards encountered in on-the-road practice.
4. Through use of the films, students can be trained in basic responses to emergency situations in perfect safety—something impossible to do on the road.
5. Desirable attitudes and driving habits can be built and deeply impressed by repetitive use of the films which are rich in attitude-building situations.
6. Undesirable and unsafe habit patterns can be detected quickly and corrected before they become firmly fixed.

Simulators may be installed permanently in a school classroom, or they may be purchased ready-installed in a 16-unit trailer assembly. The trailer is completely equipped, heated, lighted and air-conditioned. It needs only a source of power to operate. It can be moved from school to school to meet program specifications without loss of time for setting up, since it is only necessary to plug it into a power source.

At the present time, two simulator systems are available. These are the Aetna Drivotrainer System, and the Link-Allstate Driving Simulator. Detailed information about these simulator systems may be obtained from either Aetna Life & Casualty Company at Hartford, Connecticut (Aetna Drivotrainer), or Link Group, Singer-General Precision, Inc., Binghamton, New York.

DRIVING RANGES

Another facility for practice driving which minimizes road hazards is the off-street driving range. Unfortunately, an off-street driving range needs a large tract of land. This, of course, is very difficult to obtain in New York City. Consequently, unless an individual school has such a space as part of its grounds, or one available adjacent to it, it would be impossible to have a range.

Driving ranges should have minimum dimensions of 350 x 450 feet. The range should be designed to incorporate areas for all standard driving skills such as straight-ahead driving, right and left corners, turn-around maneuvers, angle and parallel parking. The surface should be hard and dust-free so that it may be used in any weather. If it is possible to illuminate the area, it then might be used at night for adult education programs.

If the school could make arrangements to use part of the facilities of a nearby park, the driving area could be marked by removable rubber stanchions so that on weekends or evenings the park facilities could be open to the public. Such an arrangement would allow the area to serve a dual purpose.

If the driving range is part of the school ground and can be made permanent, the most efficient use of instructor time can be attained by using a control tower with two-way radio equipment. The control tower should be erected at a point which will not interfere with the driving area, yet where an unobstructed view of all parts of the range

may be had. The radio equipment can consist of a standard citizens band transceiver for the control tower and individual walkie-talkie units in each car, all operating on the same fixed frequency. A further addition might be a radio-controlled ignition cutoff relay in each car, all controlled by the instructor in the control tower so that any or all cars could be stopped by the instructor in an emergency.

The advantages of the range system are:

1. Multiple-car instruction by one instructor.
2. All students in a group drive an entire 40-minute period instead of only ten minutes each period.
3. Off-street range reduces road hazards compared with on-street practice.
4. Can be used to reduce the amount of on-the-road practice driving necessary.
5. More students may be processed than with on-the-road practice only.

A typical off-street range is shown in the accompanying drawing (Fig. 6).

OTHER PRACTICE AREAS

In all probability, most of the high school practice driving programs in New York City will have to be given on the streets of the city. Since much of the city has heavy and congested traffic at certain hours of the day, and since most of the city has more traffic than is safe for most beginners to contend with, those concerned with the organization of the Driver Education program at any given high school, particularly those located in Manhattan, should carefully observe the traffic on the streets and highways in the vicinity of the school so that they can select a practice area which is the safest for beginning drivers, and yet will offer a route which will afford adequate practice in the necessary driving skills. It must be borne in mind that *no driving instruction can be given on streets adjacent to public parks or playgrounds.* This is a New York City traffic regulation, and must be complied with. It should also be remembered that limitations must be imposed as to distance travelled from the school during the instruction period, since the schedule may be

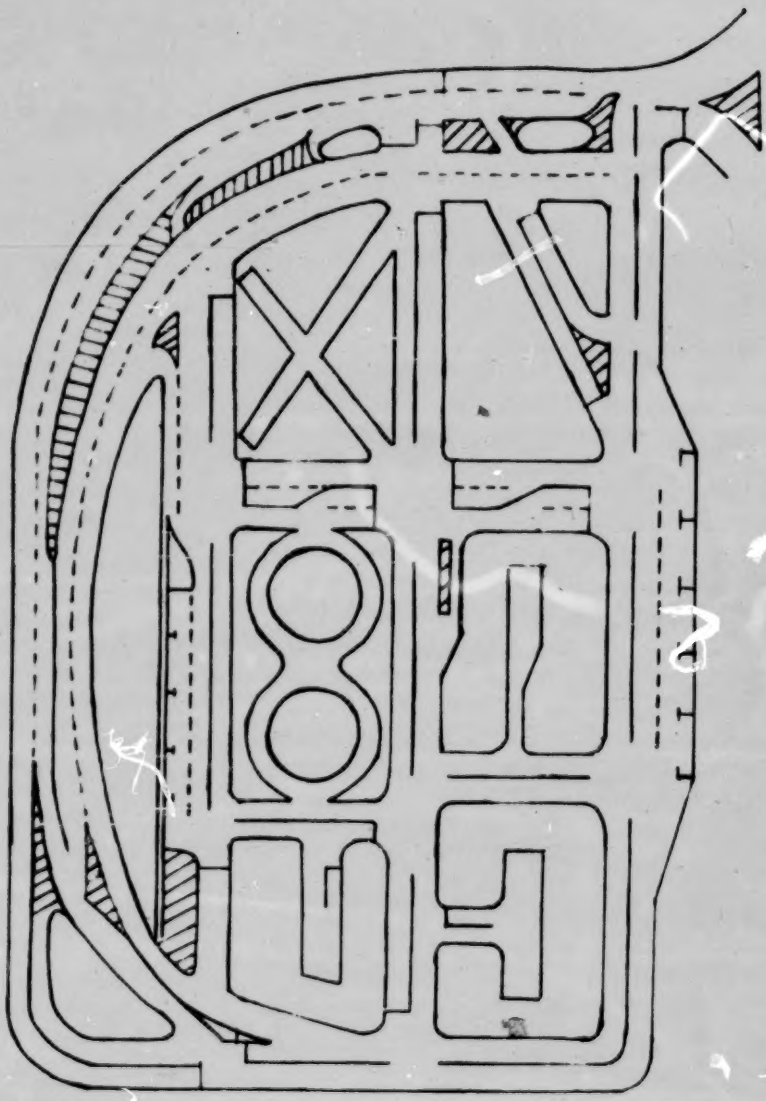


Fig. 6. Typical Off-Street Driving Range

seriously interfered with by cars returning late for the next class. Instructors should always remember that the operator of a Driver Education car has no special privileges and no immunity from arrest for traffic violations. In fact, an arresting officer may, if he sees fit, give out two summonses for a violation, one to the student for committing the violation, and another to the instructor for negligence in allowing the student to commit it.

Areas with heavy traffic or higher speed roadways should be used by the instructor only when, in his judgment, the students have progressed sufficiently to be able to cope with such conditions.

Evaluation

One of the most important ways to maintain the viability of a Driver Education program is by continuing evaluation. This does not mean that the program is perpetually operated on an experimental basis under research conditions. It simply means that each school should periodically examine its program to insure that a) it meets or exceeds the State requirements for course approval; b) it adheres to its stated objective in all areas; c) it looks for possible improvement in teaching techniques both in classroom and in practice driving; d) it enriches the curriculum content wherever possible; e) it maintains or improves the efficiency of its follow-up; and f) it takes all advisable measures to promote and maintain optimum extramural relations.

Any evaluation should be threefold in scope:

1. There should be a critical analysis of the administration of the program with a view to maintaining or increasing its efficiency and to planning for possible expansion.

2. There should be an evaluation of the teaching so that methods, techniques, and curriculum material may keep pace with progress in the field.

3. There should be an evaluation of the students' progress through all phases of instruction: classroom, simulator, and range and road practice.

The following charts should prove useful for a program of continuing evaluation.

EVALUATION CHART: ADMINISTRATION

1. Does the Driver Education course meet or exceed the approved standards of the State Education Department?
2. Does the Driver Education course have a regular place in the school curriculum?
3. Is the course so organized and administered that all eligible students may enroll and complete it?
4. Are all instructors who are teaching the course possessors of valid MV283 certificates approved for teaching in public schools?
5. Is the Driver Education program supervised and coordinated by one man?
6. Does the course provide a minimum of thirty clock hours of classroom theory instruction and six hours of on-the-road practice driving instruction?
7. Is ½ credit hour given for satisfactory completion of the Driver Education course?
8. Is the schedule so arranged that classroom and practice are given concurrently?
9. Is there a properly equipped classroom assigned to the Driver Education program with up-to-date teaching aids of various kinds?
10. Are school-dealer contracts so arranged that cars are available when instruction begins?
11. Has the school arranged for adequate facilities for garaging, refueling, and servicing the school cars?
12. Have mutually satisfactory arrangements been made between dealer and school for return of school cars and reimbursement for damage?
13. Has a written course of study been prepared by the faculty for use in the school, using the curriculum guide as reference?

14. Are physical, mental, and emotional histories of prospective enrollees investigated before they begin practice driving, and all doubtful cases reviewed with parents and family physician?

15. Is parental consent obtained in the case of every prospective student?

16. Does the school maintain good public relations with the surrounding community? Does the school keep the community well-informed as to the nature and purpose of the program?

17. Does the school have a definite procedure to be followed in case of accident? Is this procedure understood by teachers and students?

18. Is an organized file of unbound Driver Education information and reference material kept in the school library for student and teacher use?

19. Are complete records dealing with use of cars, cost of operation and maintenance, and student evaluation kept?

EVALUATION CHART: CLASSROOM TEACHING

1. Is the approved course of study adhered to?

2. Are topics taught in best order for optimum student development?

3. Are detailed daily lesson plans which are based on the whole driving task used?

4. Is the classroom decorated with pertinent charts, posters, and pictures to provide students with an appropriate atmosphere for the course?

5. Is optimum time allowed for the study of each topic?

6. Are psychophysical tests used? Is a follow-up provided?

7. Are approved texts and workbooks used?

8. Is the class organized to provide for class discussion, assigned reading, project work, reports, and supervised field trips?

9. Are students informed of hazards of air pollution and use of protective devices?

10. Is adequate use made of outside speakers, such as personnel from the Police Department, Traffic Department, safety organizations, insurance companies, etc.?

11. Is full use made of visual aids, models, traffic boards, etc.?
12. Are various tests such as standard achievement tests in Driver Education, attitude scales, and periodic progress test used?
13. Are panel discussions on pertinent driving topics arranged for student participation?
14. Is a searching and comprehensive final examination given?
15. Are lesson plans reviewed each year and revised to meet with changing times?
16. Is there close coordination between classroom and on-the-road instruction?

EVALUATION CHART: TEACHING PRACTICE DRIVING

1. Has the practice driving schedule been so arranged that no student program conflicts occur?
2. Has each car been filled with maximum allowable number of students for each instruction period?
3. Has the driving route been carefully reviewed by instructors before taking students out for instruction? Does it have adequate real-world driving experience opportunities?
4. Has the route been planned to fit the abilities of student drivers?
5. Has careful orientation been given each practice group on the first day?
6. Has sufficient practice been given each student in operating the controls before allowing him to drive on the road?
7. Is each individual student driving problem met with a technique best suited to overcome it in minimum time?
8. Is sufficient repetitive drill given in skill areas where student inadequacies appear?
9. Are demonstrations and group instruction always given when teaching a new skill or maneuver?
10. Are students well-grounded in their duties and responsibilities as drivers and are they aware of the hazards, both mechanical and psychological, of motor vehicle operation?

11. Are students made cognizant of state, city, and local traffic ordinances?
12. Are students always prevented from committing imminent violations, and are they always made aware of the situation?
13. Are students allowed as much initiative, and given as much responsibility as safety permits?
14. Is a periodic progress chart and attendance report kept for each student? Are students informed of their progress?
15. Is praise for good driving given as well as criticism for mistakes?
16. Are students given a searching road test at the end of the course?
17. Are students scored on the basis of attitude and driving citizenship as well as driving skill?

EVALUATION OF STUDENTS

The evaluation of the student should begin before he is enrolled in the course. This is essential because one of the goals of each student is the passing of the official Motor Vehicle Department road test. To do this successfully, the student must meet the minimum requirements for vision and color blindness as part of his examination. Therefore, each student should be tested for minimum requirements for visual acuity, color blindness, and hearing and should not be enrolled in the course unless he can meet these requirements. Furthermore, an investigation into his mental and emotional history should be made to reduce possible hazards on the road.

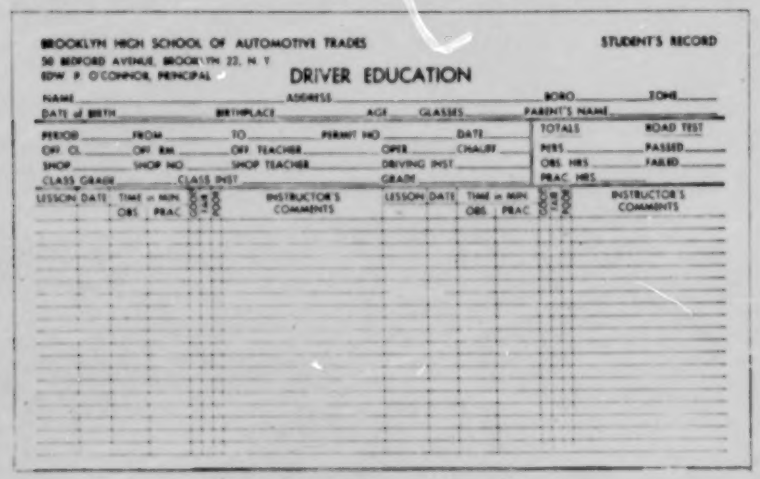
After the student is enrolled in the course, several evaluative devices should be used. One of these, the battery of psychophysical tests, should be administered as early as possible in the classroom course, since the results of these tests provide important material for lessons and discussion, as well as information important to the teacher. Specific information will be given about these tests in the section devoted to the Classroom Course of Study.

Evaluation of attitudes is another important phase of the evaluation program. This may be done by observation and by administering one or more of the attitude scales available. Perhaps the one most commonly used for Driver Education is the Siebrecht Attitude Scale (see Appendix). This may be administered at the beginning and again at the conclusion of the course, and the results may be compared.

Evaluation of the student's degree of involvement in class activities, discussions, reports, and other activities, including field trips and projects, forms another facet of the total evaluation plan. To complete the evaluation of the student in his classroom work, standard Driver Education knowledge tests should be administered at predetermined intervals.

Evaluation of the student's progress and growth as a driver, his evidence of attitude development, and the acquisition of various driving skills and judgment are best accomplished through daily observation of his work behind the wheel. One of the better ways to follow his progress is to keep a daily record of the number and type of errors made by the student during each practice period. By examining this record, the student's progress becomes evident very quickly. In the beginning the card will show many errors of various types, i.e., steering, braking, acceleration, signaling, lack of observation. As he gains experience under proper instruction, the number and types of errors decrease, until, near the end of the course, if his progress has been normal, his record card shows almost no errors. One type of record card is shown here (Fig. 7).

One other type of test should form part of the student evaluation. This is a comprehensive road test which may be given only once at the end of the course, or may be used as a useful instructional tool many times during the latter part of the course. One successful method of using the


BROOKLYN HIGH SCHOOL OF AUTOMOTIVE TRADES
50 BEDFORD AVENUE, BROOKLYN 22, N. Y.
EDW. P. O'CONNOR, PRINCIPAL

STUDENT'S RECORD

DRIVER EDUCATION

NAME _____ ADDRESS _____ BORO _____ TOWN _____

DATE of BIRTH _____ BIRTHPLACE _____ AGE _____ GLASSES _____ PARENT'S NAME _____

PERIOD _____ FROM _____ TO _____ PERMIT NO _____ DATE _____

OFF CL _____ OFF RM _____ OFF TEACHER _____ OPER _____ CHAUFF _____

SHOP _____ SHOP NO _____ SHOP TEACHER _____ DRIVING INST _____

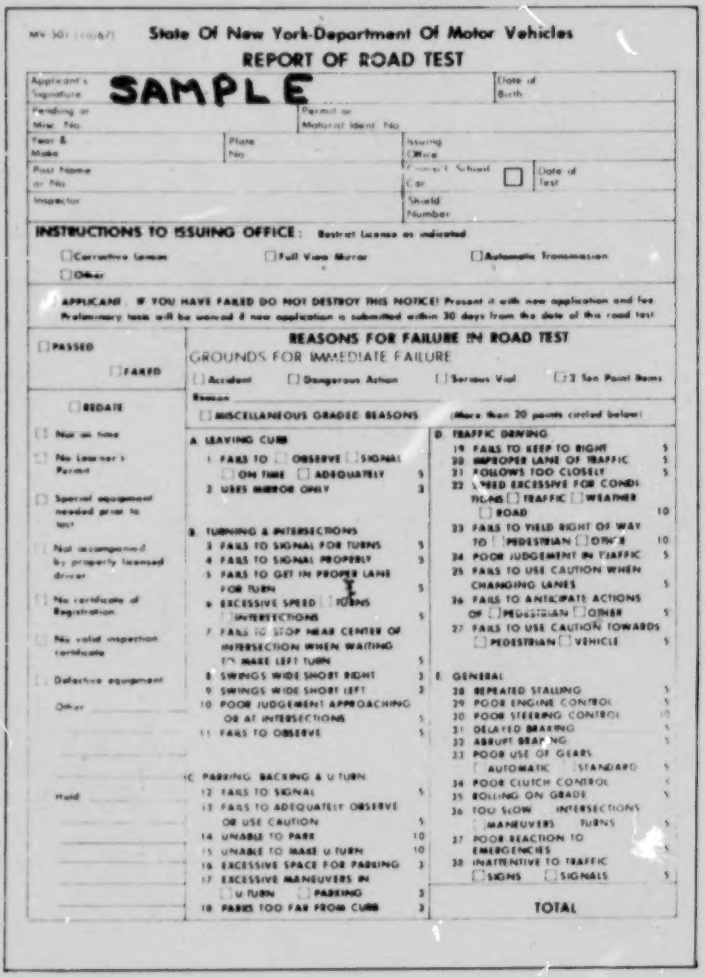
CLASS GRADE _____ CLASS INST _____ GRADE _____

TOTALS	ROAD TEST
HRS _____	PASSED _____
OBS. HRS _____	FAILED _____
PRAC. HRS. _____	

LESSON DATE	TIME in MIN. OBS.	TIME in MIN. PRAC.	CODE	INSTRUCTOR'S COMMENTS	LESSON DATE	TIME in MIN. OBS.	TIME in MIN. PRAC.	CODE	INSTRUCTOR'S COMMENTS

Fig. 7. Student Road Record Card

test is to allow the observing students in the rear seat to score each student driver. The instructor acts as umpire, giving constructive criticism to both student judges and driver. One of the better tests in this category is the McGlade Road Test (see Appendix). Satisfactory results may also be obtained by using facsimiles of the New York State Motor Vehicle Department Road Test (Fig. 8). This test, while not as comprehensive as the McGlade, has proven very useful.



MV-301 (10/67) **State Of New York Department Of Motor Vehicles**

REPORT OF ROAD TEST

SAMPLE

Applicant's Signature | Date of Birth | Pending or Misc. No. | Permit or Motorist Ident. No. | Year & Make | Plate No. | Issuing Office | Post Name or No. | Car | Date of Test | Inspector | Shield Number

INSTRUCTIONS TO ISSUING OFFICE: Restrict License as indicated

☐ Corrective Lenses ☐ Full View Mirror ☐ Automatic Transmission ☐ Other

APPLICANT: IF YOU HAVE FAILED DO NOT DESTROY THIS NOTICE! Present it with new application and fee. Preliminary tests will be waived if new application is submitted within 30 days from the date of this road test.

☐ PASSED ☐ FAILED

☐ REDATE

☐ Not on hand
☐ No Learner's Permit
☐ Special equipment needed prior to test
☐ Not accompanied by properly licensed driver
☐ No certificate of Registration
☐ No valid inspection certificate
☐ Defective equipment
Other

Hold

REASONS FOR FAILURE IN ROAD TEST

GROUNDS FOR IMMEDIATE FAILURE

☐ Accident ☐ Dangerous Action ☐ Serious Viol ☐ 2 Ten Point Items

Reason

☐ MISCELLANEOUS GRADED REASONS (More than 20 points circled below)

A LEAVING CURB

1 FAILS TO ☐ OBSERVE ☐ SIGNAL ☐ ON TIME ☐ ADEQUATELY 5
2 USES MIRROR ONLY 3

B TURNING & INTERSECTIONS

3 FAILS TO SIGNAL FOR TURNS 5
4 FAILS TO SIGNAL PROPERLY 5
5 FAILS TO GET IN PROPER LANE FOR TURN 5
6 EXCESSIVE SPEED ☐ TURNS ☐ INTERSECTIONS 5
7 FAILS TO STOP NEAR CENTER OF INTERSECTION WHEN WAITING TO MAKE LEFT TURN 5
8 SWINGS WIDE SHORT RIGHT 3
9 SWINGS WIDE SHORT LEFT 3
10 POOR JUDGEMENT APPROACHING OR AT INTERSECTIONS 5
11 FAILS TO OBSERVE 5

C PARKING BACKING & U TURN

12 FAILS TO SIGNAL 5
13 FAILS TO ADEQUATELY OBSERVE OR USE CAUTION 5
14 UNABLE TO PARK 10
15 UNABLE TO MAKE U TURN 10
16 EXCESSIVE SPACE FOR PARKING 3
17 EXCESSIVE MANEUVERS IN ☐ U TURN ☐ PARKING 3
18 PARKS TOO FAR FROM CURB 3

D TRAFFIC DRIVING

19 FAILS TO KEEP TO RIGHT 5
20 IMPROPER LANE OF TRAFFIC 5
21 FOLLOWS TOO CLOSELY 5
22 SPEED EXCESSIVE FOR CONDITIONS ☐ TRAFFIC ☐ WEATHER ☐ ROAD 10
23 FAILS TO YIELD RIGHT OF WAY TO ☐ PEDESTRIAN ☐ OTHER 10
24 POOR JUDGEMENT IN TRAFFIC 5
25 FAILS TO USE CAUTION WHEN CHANGING LANES 5
26 FAILS TO ANTICIPATE ACTIONS OF ☐ PEDESTRIAN ☐ OTHER 5
27 FAILS TO USE CAUTION TOWARDS ☐ PEDESTRIAN ☐ VEHICLE 5

E GENERAL

28 REPEATED STALLING 5
29 POOR ENGINE CONTROL 5
30 POOR STEERING CONTROL 10
31 DELAYED BRAKING 5
32 ABRUPT BRAKING 5
33 POOR USE OF GEARS ☐ AUTOMATIC ☐ STANDARD 5
34 POOR CLUTCH CONTROL 5
35 ROLLING ON GRADE 5
36 TOO SLOW ☐ INTERSECTIONS ☐ MANEUVERS ☐ TURNS 5
37 POOR REACTION TO EMERGENCIES 5
38 INATTENTIVE TO TRAFFIC ☐ SIGNS ☐ SIGNALS 5

TOTAL

Fig. 8.

A final, but equally important, phase of evaluation should be a follow-up program. This is probably the most difficult part of the evaluation, since, for a complete follow-up, it is necessary to obtain the cooperation of several agencies: the student completing the course, his insurance company, and the Motor Vehicle Department.

Probabilities are that a limited follow-up may be the only feasible one, that of surveying the students completing the course at stated intervals. The first stage might involve sending out a double, stamped postal card, asking the student for results of his official road test, whether or not he received his license and whether or not he is driving. Then, approximately one year later, a more detailed questionnaire may be sent requesting such information as the amount of driving time, nature of driving (city or rural, etc.), whether or not any violations were recorded, accident record, and whether or not he now owns his own car. Naturally, all of the returns depend on the degree of cooperation which can be obtained from the former student. A favorable attitude toward such a survey might be instilled in the students during the Driver Education course if the proper approach is made.

Evaluation, as discussed in the foregoing pages, should produce and maintain a program meeting high standards and obtain optimum results.

Other Driver Education Programs

SUMMER SCHOOL

The requirements, organization, teaching staff, teaching certification, equipment, and course content are the same for the summer school program as for the regular day school program, with the following exceptions:

1. *Program approval.* Summer session program requires separate annual approval on a specially provided form (see Appendix).
2. *Driver Education* may be offered as part of an approved summer high school program, and one-half unit of credit must be granted for the successful completion of the program.

3. *Scheduling* (period length). No classroom or laboratory period may exceed 90 minutes in length.

4. *Time Requirements*

   a. The summer school Driver Education program must be in session for a minimum of 30 days exclusive of registration and final examination.

   b. Each pupil must receive a minimum of 16 ninety-minute periods of classroom instruction, and 16 ninety-minute periods of laboratory instruction.

   c. A pupil may be scheduled for one 90-minute period of classroom instruction and one 90-minute period of laboratory instruction per day.

ADULT EDUCATION

The Adult Driver Education Program may have several purposes:

1. It provides systematic, supervised, approved methods of training those adults who never learned to drive as teenagers.

2. It provides a means of updating and retraining adults who have not driven in some time, or who feel inadequately trained to cope with the demands made on the driver by modern traffic.

3. It can provide a diagnostic and retraining program for accident-prone drivers and drivers with records of repeated violations with the aim of rehabilitating them.

The adult program makes use of the facilities and equipment used by the day high school program. This includes the course of study, textbooks, and all other facilities. However, the regulations and the requirements differ in certain respects; these are:

1. Only out-of-school individuals may be admitted to the course. "Out-of-school" means persons above compulsory school age not in regular attendance at a public or private secondary school.

2. All students must possess learners' permits before starting on-the-road practice.

3. All students make their own applications for permits to the Motor Vehicle Department.

4. All students must make their own arrangements for use of a car, appointments for road tests, and all contact with the Motor Vehicle Department concerning licenses.

5. No Motor Vehicle Department certificate is issued for the successful completion of the course.

6. No insurance discount is allowed by insurance companies for the completion of this course.

7. An instructor may hold an MV 283 certificate of approval or a certificate of equivalency if he has met the requirements.

As with the High School Driver Education program, the course must consist of two parts, classroom instruction and on-the-road instruction. The on-the-road instruction class may not have more than four students in each practice group. For convenience, class size for the classroom instruction group should be in multiples of four, i.e., 16, 20, 24, for easy practice scheduling. The usual pattern consists of two two-hour sessions per week, one hour of each session devoted to classroom instruction, and the other hour to practice driving. With this pattern, classroom instruction would last for 5 to 6 weeks, while on-the-road practice would continue for about twice that.

Expenditures for adult driver education may be included among those approved expenditures of the school system for purposes of State aid if the program meets the following specifications:

- The course gives a *minimum* of ten hours of classroom instruction.
- The course allows *no more than* twenty hours of practice driving for each group of four students.
- The program must be reported on the district's annual adult education report for the school year. Careful attendance records must be kept.

All other requirements, such as car insurance, special equipment on the dual control cars, etc., are the same as for the High School Driver Education program.

A complete reprint of the State Education Department bulletin on Adult Driver Education programs will be found in the Appendix.

Scheduling

DAY SCHOOL SCHEDULING

As has been mentioned before, the nature of a Driver Education program and the State Education Department requirements for an approved course make careful scheduling most important. To restate part of the requirements:

1. Classroom instruction and laboratory instruction must be given concurrently.

2. An approved program must consist of a minimum of 36 forty-minute periods of classroom instruction, and 36 forty-minuate periods of laboratory instruction.

3. If a simulator is used in the program, *not more than 18 periods of* laboratory instruction may be given in a simulator. *A minimum of 18 periods* of laboratory instruction must be given in a dual-control car with an instructor, on the public streets, four pupils *maximum* load per period.

4. If a multiple-car, off-street driving range is used in the program, not more than 18 periods of laboratory instruction may be given using this method. A minimum of 18 periods of on-the-road practice driving with the instructor and a maximum of four pupils per car per period must be given.

It will thus be seen that, no matter what devices are used to aid laboratory instruction, at least 18 forty-minute periods *must* be devoted to practice driving on the public streets in a dual-control car in order to meet the requirements for State approval.

Since junior operator licenses are not valid within the five boroughs of New York City and Nassau County, and since the holder of an MV285 Course Completion Certificate may not present it to the Motor Vehicle Department and those set by the National Education Association. These offered until the second semester of the 11th year, and preferably in the 12th year.

Another factor which will influence scheduling is the discrepancy between the minimum standards approved by the State Education Department and those set by the National Education Association. These call for 30 clock hours of classroom instruction and six clock hours of actual behind-the-wheel practice, exclusive of observation time. This means that, although the N.E.A. and the State Education Department minimum requirements for on-the-road practice are identical, the N.E.A. requires more classroom instruction than the State. Since the insurance companies use N.E.A. standards for determining a policy holder's eligibility for a premium discount on the basis of his having completed a Driver Education course, he would need 45 periods of classroom instruction instead of 36 periods to qualify. Thus, it is desirable for the school to institute a Driver Education program which would satisfy both sets of standards. An example of one such schedule using the conventional pattern of classroom instruction and four-in-a-car, on-the-road laboratory instruction is shown in Fig. 9. This schedule exceeds the minimum State Education Department requirements and meets those of N.E.A., allowing one teacher to provide a complete course for 36 students.

If the school has a simulator available, then the schedule may be redesigned to accommodate a classroom simulator and on-the-road practice driving to provide a richer, more efficient program. Such a schedule is shown in Fig. 10. This schedule, because of the simulator, makes optimum use of the instructor's time and allows more students to be processed. Using this schedule, in one semester, one instructor could give 96 students classroom instruction and 64 students simulator instruction and practice driving on the road.

Another type of schedule might involve the use of classroom instruction, multiple-car off-street driving range, and on-the-road instruction. If it is assumed that 12 cars are available for use, then the sample schedule shown in Fig. 11 might be used. This schedule would allow one teacher to process 72 students through range practice, and 60 through the four-in-a-car, on-the-road program in one semester.

Regardless of the form of scheduling, classroom instruction should have a regular place in the high school curriculum. Laboratory instruction may be given during study periods or before the regular school day, or after, or both.

DRIVER EDUCATION SCHEDULE

CLASSROOM AND ON THE ROAD

One Teacher-36 Pupils

Days	Periods				
	1	2	3	4	5
1	C	R1	R2	R3	R4
2	R5	R6	R7	R8	R9
3	C	R1	R2	R3	R4
4	R5	R6	R7	R8	R9
5	C	R1	R2	R3	R4
6	R5	R6	R7	R8	R9
7	C	R1	R2	R3	R4
8	R5	R6	R7	R8	R9
9	C	R1	R2	R3	R4
10	R5	R6	R7	R8	R9
11	C	R1	R2	R3	R4
12	R5	R6	R7	R8	R9
83	C	R1	R2	R3	R4
84	R5	R6	R7	R8	R9
85	C	R1	R2	R3	R4
86	R5	R6	R7	R8	R9
87	C	R1	R2	R3	R4
88	R5	R6	R7	R8	R9
89	C	R1	R2	R3	R4
90	R5	R6	R7	R8	R9

KEY: C = Classroom instructions, 36 pupils

R1-R9 = Laboratory instruction, on-the-road groups of 4 pupils each

Fig. 9

TYPICAL DRIVER EDUCATION SCHEDULE

CLASSROOM, SIMULATOR, AND ON-THE-ROAD PRACTICE

Days	Periods				
	1	2	3	4	5
1	C1	R1	R2	C2	R9
2	S1	R5	R6	S3	R10
3	C1	R1	R2	C2	R9
4	S2	R5	R6	S4	R10
5	C1	R1	R2	C2	R9
6	S1	R5	R6	S3	R10
7	C1	R1	R2	C2	R9
50	S1	R7	R4	S3	R11
51	C1	R3	R8	C2	R12
52	S2	R7	R4	S4	R11
80	C3	R13	R14	R15	R16
81	C3	R13	R14	R15	R16
82	C3	R13	R14	R15	R16
83	C3	R13	R14	R15	R16
84	C3	R13	R14	R15	R16
85	C3	R13	R14	R15	R16
86	C3	R13	R14	R15	R16
87	C3	R13	R14	R15	R16
88	C3	R13	R14	R15	R16
89	C3	R13	R14	R15	R16
90	C3	R13	R14	R15	R16

KEY: C1, C2, C3 - Classroom instruction groups, 32 pupils each
S1, S2, S3, S4 = Simulator instruction groups from C1, C2, C3, 16 pupils each
R1, R16 = On-the-road instruction groups from C1, C2, C3, 4 pupils each
Number of teachers - 1 Number of semesters - 1

Fig. 10

TYPICAL DRIVER EDUCATION SCHEDULE

CLASSROOM, MULTIPLE RANGE, AND ON THE ROAD

Days	Periods 1	2	3	4	5
1	C1	P1	P2	P3	C2
2	R1	R2	R3	R4	R5
3	C1	P1	P2	P3	C2
4	R6	R7	R8	R9	C2
5	C1	P1	P2	P3	C2
6	R1	R2	R3	R4	R5
7	C1	P1	P2	P3	C2
8	R6	R7	R8	R9	C2
9	C1	P1	P2	P3	C2
10	R1	R2	R3	R4	R5
11	C1	P1	P2	P3	C2
12	R6	R7	R8	R9	C2
13	C1	P1	P2	P3	C2
14	R1	R2	R3	R4	R5
15	C1	P1	P2	P3	C2
16	R1	R7	R8	R9	C2
17	C1	P1	P2	P3	C2
18	R1	R2	R3	R4	R5
19	C1	P1	P2	P3	C2
20	R6	R7	R8	R9	C2
21	C1	P1	P2	P3	C2

KEY: C1, C2 = Classroom instruction, 36 pupils per group
P1, P2, P3 = Multiple-car range instruction, 12 cars, 1 pupil per car
R1-R9 = On-the-road instruction, 4 pupils per group

Fig. 11.

END-TERM PROCEDURE

About five weeks before the end of the course, a letter should be sent to the State Education Department asking for a supply of Request for Course Completion Certificates in Driver Education (see Appendix). When these are received, and not later than three weeks before the date for course completion, the names of students who are expected to pass the course are entered on these forms. The forms are made out in duplicate, and great care must be taken to enter names (no nicknames) and dates of birth as they appear on students' birth certificates. The latest addresses should be used. All spaces on the form should be completed at this time except the space for listing the student's final mark, and the space marked "Date certificates were issued." Signatures of the driving instructors should appear along the bottom edge of each sheet, and the principal's signature should be written in the space provided. Originals of the list should then be sent to the Re-examination Control Section, Department of Motor Vehicles, 504 Central Avenue, Albany, New York 12206.

The Department of Motor Vehicles will return the list along with the exact number of blank MV285 Course Completion Certificates requested. These are later completed by the school issuing them when it is determined which students have completed the course satisfactorily. Care must be taken to make no errors in filling out the MV285 Certificate, since an error or an erasure of anything except an address will void the certificate. Should errors be made, it will be necessary to contact the Motor Vehicle Department in Albany and request replacement certificates for those voided. Send any void or unused MV285 certificates back to the Motor Vehicle Department at the end of the course. At this time fill in the final marks on the "Request for Course Completion" lists, also the date certificates were issued. Note that a numerical mark is not necessary on the list. "Pass" or "Fail" is acceptable. Return the completed list, with void or unused MV285 certificates, to the Motor Vehicle Department. Of course, all student marks should be recorded on students' permanent records.

At the time the MV285 certificate is issued to the student, he should also be given a statement on official school stationery certifying that he has satisfactorily completed a Driver Education Course consisting of the approved number of hours of classroom instruction and the approved number of hours of on-the-road instruction. A sample of such a letter appears in the Appendix. The letter should be signed either by the

principal or the individual supervising Driver Education. The letter may be presented to the insurance company carrying the insurance purchased by the student, as evidence that he completed a Driver Education Course and is eligible for a discount on the cost of the premium.

If the school-dealer car contract is such that the car must be returned to the dealer at the end of the school year, the following procedure should be used. The school should make up a quantity of "Joint Car Inspection Report" forms similar to the one shown in the Appendix. When the instructor returns the car to the dealer, the instructor and dealer should inspect the car jointly and note defects in the proper places on the form. The form should be made out in duplicate, one copy placed in school records, the other retained by the dealer. Thus, if and when the dealer presents the school with a bill for repairs for damage sustained during the school year, the school authorities know exactly how much damage they are liable for and misunderstandings or disputes between the school and the dealer will not occur.

At the time the car is surrendered, the registration renewal stub (stub #2) should be signed by the proper school authority and delivered to the dealer with the car. The registration plates should be removed, and retained by the school until the new car is ready for school use. If the dual control and bumper sign belong to the school, they should be removed by the dealer and either returned to the school, or held for installation on the next new car to be delivered to the school.

Certain automobile manufacturers require from their dealers a certification of car use by the school before they pay the dealer the extra amount allowed in consideration of the loan of the car to the school for Driver Education.

These forms are sent to the school by the dealer for the principal's signature in quadruplicate. One form is kept by the principal for his files; the others go to the dealer.

SUMMER SCHOOL SCHEDULING

Specific requirements for course approval, etc., for the summer high school Driver Education have been discussed in a previous section. However, since scheduling is necessarily different because of the number of teaching days and period length, a sample of a schedule for a summer Driver Education Program is shown in Fig. 12. This is a typical schedule

TYPICAL SUMMER SCHOOL SCHEDULE

DRIVER EDUCATION: CONVENTIONAL CLASSROOM AND LABORATORY

	Periods		
Days	1	2	3
1	C	R1	R2
2	R3	R4	C
3	R5	R1	C
4	R2	R3	C
5	R4	R5	R1
6	R2	R3	C
7	R4	R5	R1
8	R2	R3	C
9	R4	R5	R1
22	R2	R3	C
23	R4	R5	R1
24	R2	R3	C
25	R4	R5	R1
26	R2	R3	C
27	R4	R5	R1
28	R2	R3	C
29	R4	R5	R1
30	R2	R3	R4
31	R5	R1	R2
32	R3	R4	R5
33		F I N A L	

KEY: C = Classroom instruction group, 20 students
R1-R5 = On-the-road instruction groups from C, 4 students per group
Period length = 90 minutes
Schedule arranged for one teacher

Fig. 12.

meeting the requirements for State approval and issuance of MV285 Course Completion Certificates. In this schedule one instructor processes twenty students through both classroom and laboratory instruction in a conventional pattern.

End-course procedure is the same as that discussed for the regular day high school program.

SCHEDULING THE ADULT EDUCATION PROGRAM

When a school schedules an adult education program of Driver Education, it must at least equal the minimum requirements, while being within the maximum requirements of the Adult Education Program. For example, in a ten-week period of instruction, a group of twenty students might meet once each week for one hour of classroom instruction, and be divided into five groups of four students each for on-the-road practice instruction for two one-hour periods each week (see Fig. 13). This would give each student ten hours of classroom instruction work and eighteen hours of on-the-road instruction.

If twenty-four students were registered in the class, similar scheduling could give each student ten hours of classroom instruction and fifteen hours of on-the-road instruction in the same ten-week interval (see Fig. 14). Either schedule would allow two separate groups to be given an approved course in one semester.

Suggested Schedule Adult Driver Education
Ten-Week Period 20 Students, 1 Teacher

	First Week					Second Week					Third Week					Fourth Week					Fifth Week				
	M	T	W	T	F	M	T	W	T	F	M	T	W	T	F	M	T	W	T	F	M	T	W	T	F
First Hour	C	R2	R4	R1	R3	C	R1	R3	R5	R2	C	R5	R2	R4	R1	C	R4	R1	R3	R5	C	R3	R5	R2	R4
Second Hour	R1	R3	R5	R2	R4	R5	R2	R4	R1	R3	R4	R1	R3	R5	R2	R3	R5	R2	R4	R1	R2	R4	R1	R3	R5
	Sixth Week					Seventh Week					Eighth Week					Ninth Week					Tenth Week				
	M	T	W	T	F	M	T	W	T	F	M	T	W	T	F	M	T	W	T	F	M	T	W	T	F
First Hour	C	R2	R4	R1	R3	C	R1	R3	R5	R2	C	R5	R2	R4	R1	C	R4	R1	R3	R5	C	R3	R5	R2	R4
Second Hour	R1	R3	R5	R2	R4	R5	R2	R4	R1	R3	R4	R1	R3	R5	R2	R3	R5	R2	R4	R1	R2	R4	R1	R3	R5

Total: Ten hours classroom instruction. Eighteen hours on-the-road instruction.

Fig. 13.

Suggested Schedule Adult Driver Education
Ten-Week Period 24 Students, 1 Teacher

	First Week					Second Week					Third Week					Fourth Week					Fifth Week				
	M	T	W	T	F	M	T	W	T	F	M	T	W	T	F	M	T	W	T	F	M	T	W	T	F
First Hour	C	R2	R4	R6	R2	C	R5	R1	R3	R5	C	R2	R4	R6	R2	C	R5	R1	R3	R5	C	R2	R4	R6	R2
Second Hour	R1	R3	R5	R1	R3	R4	R6	R2	R4	R6	R1	R3	R5	R1	R3	R4	R6	R2	R4	R6	R1	R3	R5	R1	R3
	Sixth Week					Seventh Week					Eighth Week					Ninth Week					Tenth Week				
	M	T	W	T	F	M	T	W	T	F	M	T	W	T	F	M	T	W	T	F	M	T	W	T	F
First Hour	C	R5	R1	R3	R5	C	R2	R4	R6	R2	C	R5	R1	R3	R5	C	R2	R4	R6	R2	C	R5	R1	R3	R5
Second Hour	R4	R6	R2	R4	R6	R1	R3	R5	R1	R3	R4	R6	R2	R4	R6	R1	R3	R5	R1	R3	R4	R6	R2	R4	R6

Total: Ten hours classroom instruction. Fifteen hours on-the-road instruction.

Fig. 14.

CHAPTER 2

Teaching Driver Education

Classroom Teaching

The basis for an instructional program in Driver Education is the definition and analysis of the driving task. The driving task is defined as the sum total of all activities from the inception of a trip to its completion. Thus, the driving task includes not only physical manipulation of the automobile, but impulses and sensations experienced, decisions made, and responses given to bring the car to the termination of its trip.

An analysis of the driving task provides the foundation of an instructional program in Driver Education. To make such an analysis, we must describe the highway transportation system, of which our drivers will be a part. Any description of our highway transportation system must include its malfunctions which create serious traffic problems and which provide a justification for the Driver Education program.

Since modern concepts of Driver Education place major emphasis on defensive driving and crash avoidance, all class lessons should include discussion of such principles and techniques.

Application of defensive driving techniques should be part of all laboratory instruction. Application and practice of crash avoidance techniques can be made in the simulator portion of laboratory instruction if the school is equipped with a simulator installation.

As with any other subject, the classroom teacher of Driver Education should be thoroughly aware of instructional methods, devices, and techniques in the field so that he may select those which show most effectiveness in achieving student progress in both skills and attitudes. Further, it is essential that the teacher make himself expert in the use of the foregoing media before presenting them to students.

Most approved Driver Education texts provide a comprehensive coverage of the material and thought in the field. However, the order of

presentation may vary with the text; therefore a detailed topical course of study is presented here. While it is not mandatory that the particular order of topics be followed, past practical experience in using this grouping has shown that it is not only successful, but there is also excellent correlation between classroom work and on-the-road instruction. These topics are presented in quasi lesson-plan form so that salient information is more easily evident. If time permits, teachers may include more discussion problems, class and individual student projects, and assignments.

It is desirable to invite outside lecturers to supplement certain units of instruction. Such lecturers as police officers from the Traffic Division, a speaker from an insurance institute, or possibly a highway or traffic engineer from the Department of Traffic can provide an interesting and worthwhile experience and present students with not only a different aspect of driver safety, but a corroboration of information given by their own instructor.

The Public Relations Bureau of the New York City Police Department has available a program demonstrating the use of police radar, the Drunkometer, and other devices. This program, which is very effective and of great interest to students, may be arranged by contacting the Public Relations Bureau and setting a date.

Other valuable experiences are field trips. These must be carefully planned and supervised if they are to be successful. Furthermore, they must be pertinent to the unit taught when the trip is taken; otherwise the experience may be of little value.

INSTRUCTIONAL AIDS

Films and Filmstrips

Films and filmstrips can be a valuable addition to the Driver Education classroom instruction program. However, they may also be a hindrance to learning if poor choices of films are made. Choosing a film, particularly one dealing with attitudes, can be critical, and a choice should be made by the instructor from his knowledge ot the personalities of the students.

For example, a serious film designed to show the consequences of teenage proneness to take chances might be ridiculed by some students.

Thus, negative teaching might result. Films should be carefully previewed to obtain maximum value. Out-of-date films should not be used since student interest may be directed at the old-fashioned dresses or the "antique" automobiles.

Overhead Projectors and Transparencies

These are excellent for classroom use particularly when discussing driving techniques or traffic maneuvers or problems. Several film companies have produced complete sets of transparencies and overlays for the Driver Education classroom program.

Other Visual Aids

Magnetic or flannel traffic boards may be used to advantage for demonstrations of traffic situations or problems. These boards are available with all accessories for creating almost any driving situation. Easels may be obtained for holding the boards so that valuable space may not be obstructed.

Working models of automobile units, such as steering mechanism, engine, clutch, transmission, drive shaft, and differential may be purchased or constructed in school shops. These models, which are extremely useful in demonstrating the principles of the various major mechanical units of the automobile, serve as valuable substitutes for the real thing when space or other conditions do not permit the use of a real automobile chassis.

Psychophysical Testing Devices

These testing devices are exceedingly valuable additions to the equipment in the Driver Education classroom. Proper use of this equipment will provide important information about some of the most vital physical qualities or shortcomings of the students. It will also inform students whether or not they are deficient in the areas tested. The instructor can teach such students how to compensate for inadequacies so that they will be able to drive safely. The tests will also reveal those students whose scores fall into the dangerous category so that they can be advised against driving.

Psychophysical testing devices are manufactured by several different firms. A list of these manufacturers is found in the Appendix. Some of these devices are relatively simple in construction, while other are more

complicated. These devices are made to test individuals in the following areas:

1. Visual acuity
2. Peripheral vision
3. Color sensitivity
4. Depth perception
5. Night vision
6. Glare recovery
7. Steadiness
8. Reaction time

Some of the manufacturers of these devices produce an all-purpose unit in which one combination assembly gives all of the tests. Others make up the testing devices as single-purpose units, each piece giving only one type of test. When purchasing this equipment, bear in mind that a complete kit of single-purpose units can test more students at one time than a multipurpose unit. Under these circumstances, if the group is a large one, it may be more advantageous to have the kit of single-purpose testing units since less time would be used in testing the whole class.

Timing is important in the use of psychophysical testing equipment. It is recommended that the equipment be used during the time that the instruction unit on physical fitness is being taught. Its use at this point serves to emphasize the importance of physical fitness and the importance of self-knowledge of physical defects.

The use of this equipment provides excellent class participation. It is suggested that the instructor demonstrate the way in which each device is used and then appoint small committees of students to operate and score each device. The class is divided into as many groups as there are testing devices, and the groups are rotated through the battery of tests. This method allows for quick processing and more time for discussing results and their implications. The demonstration will probably use up one 40-minute period, allowing two additional periods for testing the class and for discussion.

Since the psychophysical devices marketed by different manufacturers differ somewhat in construction and operation, and since detailed instructions for the use of these devices accompany the equipment, specific instructions are not described here.

Records should be kept of the results of these tests for each individual student (see Appendix). The records can then be consulted by the

on-the-road instructor for information about the capabilities and shortcomings of his students. Advance information allows the practice driving instructor to either reject a student if his defects are dangerous and cannot be corrected, or to take the necessary steps to help students overcome or compensate for those shortcomings which may be corrected. The scores of these tests may be recorded on the reverse side of the student's individual practice record card so that the practice driving instructor will have a ready reference available.

The instructional unit guides which follow will provide material for a full semester's work (45 periods). However, if the classroom instruction is held to 36 periods (the minimum State requirements), instruction time for certain topics may be shortened, or topics such as *Operating a Motorcycle* may be dispensed with according to the judgment of the teacher in charge of the program.

Since space on the instructional unit plan sheets does not permit listing the names and addresses of the sources of audio-visual aids, a simple code system is used. At the lower left of the plan sheet, the titles of suggested films are listed together with the running time and a number in parenthesis next to the title, e.g., 1=Aetna Life and Casualty Co.; 2=American Automobile Assoc.; 10=Castle Films, etc. By consulting the Appendix in which sources of audio-visual aids are listed, a number in the right-hand column which corresponds with the number shown on the plan sheet will show the name and address of the audio-visual aid source.

Instructional Guides

Unit 1: Highway Transportation System (HTS)

Recommended Time: 1 Period *Recommended Week:* First

OBJECTIVES

Students should know the general nature of the HTS, its components, and the variety of system environments. They should also be able to define the role of the driver in the HTS, to identify HTS system failures and the consequences.

SYNOPSIS

This unit explains the nature of the HTS, its components, various system environments, its malfunctions, and the role of the driver in the HTS.

TEACHING HIGHLIGHTS

General nature of our highway transportation system, definition, and purpose

Components of the HTS
- Kinds and number of vehicles
- Numbers and characteristics of drivers

Role of the driver in the HTS
- Driver skills and judgments; decision-making

Variety of system environments

Observation and identification of system events

System malfunctions; their social and economic consequences

STUDENT ACTIVITIES

DISCUSSION

How has the HTS affected life in your community?

The importance of smooth functioning of the HTS.

The role of the driver: his functions and responsibilities in HTS.

The importance of driver functioning in relation to system failures and social and economic consequences.

CLASS PROJECTS

Survey the HTS in the school district. Determine the importance of the HTS in the daily functioning of the area. What substitutes are available in the event of serious breakdown of the HTS?

INDIVIDUAL PROJECTS

Prepare a 300-word paper showing how driver functioning affects your area socially and economically.

Unit 2: The Need for Systematic Driver Training

Recommended Time: 1 Period *Recommended Week:* First

OBJECTIVES

Students should know the need for and the advantages of supervised driver training.

SYNOPSIS

This unit of instruction deals with present-day traffic conditions, the statistics on the yearly accident rate, and the reasons why it is necessary to provide a continuing program of driver training.

TEACHING HIGHLIGHTS

Statistics on

- Number of cars registered in U.S.
- Number of licensed drivers in U.S.
- Number of people killed and injured in traffic accidents yearly.

Modern traffic problems and congestion: city, rural, high-speed highways

Mandatory that late model cars, because of their speed and power, be controlled by trained drivers

Many more untrained drivers in fatal accidents than those who have been trained

Employment opportunities for trained drivers

AUDIO-VISUAL AIDS

"X" Marks the Spot (13)*

STUDENT ACTIVITIES

DISCUSSION

Steps to reduce traffic accident toll. Report on accident statistics of teenage drivers, male and female. Compare.

The advantages of Driver Education to you.

The urgency of the pollution problem.

CLASS PROJECTS

Prepare a chart showing total car registration from 1895 through 1975 (est.).

Make a survey among the faculty to find out how many have had driver training.

INDIVIDUAL PROJECTS

Write a 300-word essay on the moral responsibility of the driver.

Suggest steps to alleviate the pollution problem.

*See page 53 for explanation of code.

Unit 3: The Legal and Financial Responsibilities of the Driver

Recommended Time: 2 Periods *Recommended Week:* First

OBJECTIVES

Students should know licensing requirements, procedures, registration procedures, and the responsibilities of drivers.

SYNOPSIS

This unit discusses the requirements and procedure necessary to obtain a driver's license and to register the ownership of an automobile. The unit also discusses the legal and ethical responsibility of the driver in order to maintain the privilege of driving.

TEACHING HIGHLIGHTS

Requirements for operator's license
- Age: 16—Jr.; 17—Dr. Ed.; 18—Reg.
- Vision: 40/40; red-green-yellow color sensitivity
- Knowledge of rules and signs (written test)
- Pass road test

Qualifications for chauffeur's license: Class I, II, III

Requirements to register a vehicle:
- Proof of ownership
- Proof of insurance coverage (FSI, FS5 forms)
- Completion of registration form
- Fees

Responsibility towards other drivers

Responsibility towards pedestrians

AUDIO-VISUAL AIDS

Your Permit to Drive (21) 11 min.
We Drivers (13) 13 min.

STUDENT ACTIVITIES

DISCUSSION

The moral responsibility of driving.

Driving—a privilege or a right? Why?

"Teen-age girls have a better driving record than teen-age boys."

The moral responsibility of taking unnecessary risks while driving. Is the thrill worth the consequences?

The minimum legal driving age. What should it be? Why?

The maximum legal driving age?

CLASS PROJECTS

Write to the Motor Vehicle Department and ask for a copy of their Driver's Manual. Compare manuals. Contact several insurance agents. Learn their views about insurance for teen-age drivers. Compare cost for teen-age boys and girls, for students completing Driver Ed. course.

INDIVIDUAL PROJECTS

Obtain, fill in, and bring to class the operator's license application. Write a 300-word essay on "The Privilege of Having a Driver's License." Obtain and fill out registration form.

Unit 4: How We Learn to Drive

Recommended Time: 1 Period *Recommended Week:* First

OBJECTIVES

Students should be familiar with various methods of learning to drive.

SYNOPSIS

This unit discusses various methods of learning to drive: the pick-up method, commercial driving schools, high school driver education. Comparisons are drawn; students judge the best method.

TEACHING HIGHLIGHTS

Pick-up method: learning from family or friends
- Advantages and disadvantages

Commercial driving schools
- Requirements for instructor: chauffeur's license (fee charged)
- Type of course: practice with 3-hour classroom
- Disadvantages

High school driver education
- Instructors
- Scope of course—standards
- Certificate
  - Privileges of certificate
- Advantages
- Training in the correct methods
- Knowledge of laws, rules, etc.
- Insurance discount

STUDENT ACTIVITIES

DISCUSSION

What can teen-agers do to raise driving standards? Adults? What are your reasons for taking Driver Ed. in school? Do you think parents or friends make good teachers?

CLASS PROJECTS

Have students survey friends and relatives as to how they learned to drive. Make a survey of last year's graduates of the course. Find out how many have had bad accidents. Prepare a chart showing comparisons in your state on fatal accidents of trained and untrained drivers.

INDIVIDUAL PROJECTS

Write a 500-word essay on "My Driving Goals."

Unit 5: Physical and Mental Fitness and Driving

Recommended Time: 3-4 Periods *Recommended Week:* Second

OBJECTIVES

Students should know the importance of being physically and mentally fit; should be familiar with physical and mental defects affecting driving. They should know the dangers in the use of alcohol, various drugs, and carbon monoxide and their effects on driving ability.

SYNOPSIS

This unit deals with physical and mental fitness, shows the use of psychophysical tests, and tests students. It discusses physical and mental shortcomings and remedies where possible. It stresses the danger in the use of alcohol and drugs while driving.

TEACHING HIGHLIGHTS

Physical fitness

State standards for vision, hearing, physical handicaps, etc.

Psychophysical tests: demonstration of test equipment

Appoint committees to operate test equipment and test students for peripheral vision, depth perception, night vision, glare recovery, color blindness, steadiness, reaction time.

Discuss results of tests

Methods of compensation for deficiencies, e.g., heart ailments, epilepsy, mental instability and driving

Use of alcohol and drugs: how they affect reaction time and judgment

Inhalation of carbon monoxide: how it dulls senses and affects reaction time

Audio-Visual Aids

Physical Characteristics of the Driver (25)
Split Second (55) 13 min.
Speed and Reflexes (44) 11 min.
Driving at Night (20) 10 min.

STUDENT ACTIVITIES

Discussion

What can be done about faulty depth perception? Is it better to have slow or fast reaction time?

Night vision, glare recovery, and driving speed.

Relationship of mental and emotional problems with driving.

Use of drugs and effect of driving ability.

Class Projects

Report on the use of psychophysical testing equipment.

Police Department demonstration of Drunk-O-Meter.

Prepare composite chart of depth perception scores of class.

Prepare chart showing various kinds of drugs and effect of each on physical condition.

Individual Projects

List mental and emotional qualities necessary for a star athlete. Compare these with qualities necessary for a top-notch driver.

Unit 5A: Dangerous Drugs and Driving

Recommended Time: 3-4 Periods *Recommended Week:* Second

OBJECTIVES

Students should know the names of dangerous drugs. They should be able to identify each type of drug and its adverse effect on the human system. They should know why none should be used.

SYNOPSIS

This unit lists and classifies the dangerous drugs in terms of kind and effect.

TEACHING HIGHLIGHTS

Tranquilizers impair driver's judgment, vision, and reaction speed. Cause drowsiness, headache, and dizziness.

Amphetamines cause false sense of confidence, hallucinations.

Antihistamines cause drowsiness, loss of alertness, possible dizziness, nausea.

Marijuana (ILLEGAL) causes overconfidence, hallucinations, impaired perception and reaction speed.

Hallucinogens: LSD, STP, etc. (ILLEGAL) cause hallucinations, total loss of judgment, perception, and ability to react.

Hard drugs: morphine, cocaine, heroin, opium, etc. (ILLEGAL) cause loss of judgment and ability to react; may cause hallucinations and loss of consciousness.

STUDENT ACTIVITIES

DISCUSSION

Effect of drugs (in col. 1) on human system if they are used with alcohol.

After-effect of amphetamines.

Reasons for heavy penalties for possession of marijuana.

Bad effects of hard drugs.

CLASS PROJECTS

Have class representative contact National Highway Traffic Safety Administration with request for copy of the study on drugs by Dunlop Associates. Use this report for class discussion on findings.

Unit 6: Human Behavior and the Driver

Recommended Time: 2 Periods *Recommended Week:* Third

OBJECTIVES

Students should be familiar with typical behavior patterns of certain drivers and how these patterns affect their driving ability; they should also know what qualities makes for mature driving behavior.

SYNOPSIS

This unit deals with various types of driver behavior patterns and how they influence the quality of driving. It also lists the specifications for a mature attitude and shows how they can add to the ability of the driver.

TEACHING HIGHLIGHTS

Types of behavior showing emotional immaturity:
- Show-off; rationalizer; egotist

The overemotional driver

Mental maturity of the top-notch driver:
- Judgment
- Attention
- Consideration for others

Alertness for critical situations in the making

Respect for traffic laws and rules of the road

"Minor" violations

AUDIO-VISUAL AIDS

Day in Court (34) 30 min.
Attitudes, Emotions & Habits (25) 30 min.
Borrowed Power (13) 19 min.
The Sixth Wheel (26) 27 min.

STUDENT ACTIVITIES

DISCUSSION

Relationship between bad attitudes, bad driving, and damage to your car.

The difference between a skillful driver and a "good" driver.

CLASS PROJECTS

Siebrecht Attitude Scale

Draw up a set of rules of conduct for passengers in a car.

Prepare and submit a series of articles on correct driving habits for publication in your school paper.

INDIVIDUAL PROJECTS

Write descriptions of a good driver and a poor driver that you know. Give details of conduct in each case which influence your description.

Unit 7: Natural Laws and the Driver

Recommended Time: 2-3 Periods *Recommended Week:* Third & Fourth

OBJECTIVES

Students should be familiar with forces of nature affecting the operation of the vehicle and should know how to drive so that these forces are kept under control.

SYNOPSIS

This unit deals with the effects of inertia, momentum, friction, impact, centrifugal force, gravity, potential and kinetic energy, on the movement of the automobile. It also explains the techniques to maintain control of the car and to allow these forces to help driving.

TEACHING HIGHLIGHTS

Statement of the natural forces affecting the motor vehicle: inertia, friction, force of impact, momentum, centrifugal force, potential, kinetic energy, gravity

Effect of natural forces on operation of vehicle

Techniques to use to counteract dangerous effect of these forces

How to drive so that some of these forces aid the driver

Effect of road surfaces on friction: Slippery pavement, dry concrete or macadam, gravel or sand

Speed, reaction time, stopping distance

Audio-Visual Aids

Natural Law (25) 30 min.
Crash and Live (20) 25 min.
Speed and Reflexes (44) 11 min.

STUDENT ACTIVITIES

Discussion

"Nature's laws enforce themselves." Give examples.

The relationship of speed to the action of laws of nature.

Comparison of perception time to reaction time.

Methods of measuring reaction time.

Can perception time be measured?

Class Projects

Prepare model demonstrations of the laws of nature in action on the automobile.

Bring in newspaper accident reports and explain how natural laws contributed to each accident.

Individual Projects

List natural forces most affecting the handling of cars. Explain each briefly.

List 5 locations in your area affected by the laws of nature.

Make a chart of stopping distances for 20, 30, 40, 50, 60, 70 mph.

Unit 8: Traffic Laws and Regulations

Recommended Time: 3 Periods *Recommended Week:* Fourth

OBJECTIVES

Students should know pertinent New York State and New York City motor vehicle regulations; they should also be familiar with the Uniform Vehicle Code and with general rules of the road.

SYNOPSIS

This unit discusses pertinent traffic laws, interprets signs, signals, and traffic warning devices, discusses the Uniform Vehicle Code and its use throughout the nation, the importance of obeying the rules of the road when driving, and special New York City traffic rules.

TEACHING HIGHLIGHTS

Origin of laws
- Licensing and car registration laws
- Equipment laws
- Knowledge of road signs and their meainng
- Interpretation of various traffic signals
- Rules of the road
- Uniform Vehicle Code
- The point system
- Moving violations
- Financial Responsibility Law
- Vehicle inspection laws
- New York City traffic rules:
  - Differences between New York City and State

STUDENT ACTIVITIES

DISCUSSION

Terms of the New York State Financial Responsibility Law. Indicate points which make you think it is a good law, those you think make it a bad law. Discuss the advantage of the Uniform Vehicle Code. Compare it with rules of the road practiced in New York State.

Highway speed limits. What should be the State limit? Why?

CLASS PROJECTS

Make a survey of the street intersections surrounding the school.

Indicate where you believe traffic signals or *Stop* signs should be installed. Back up ideas with traffic facts.

INDIVIDUAL PROJECTS

Write a 300-word essay on "The Point System." Give advantages and disadvantages of it and your opinion of how it should be changed.

Unit 9: Drivers, Pedestrians, and Cyclists

Recommended Time: 1 Period *Recommended Week:* Fifth

OBJECTIVES

Students should be able to define their relationship with and their responsibilities toward pedestrians, motorcyclists, and bicyclists. They should also know and be able to use suitable defensive driving tactics when encountering these highway users.

SYNOPSIS

This unit discusses the behavior and attitudes of pedestrians and the attitude of legal authorities toward them and toward drivers. It also discusses defensive actions which can be taken to prevent accidents.

TEACHING HIGHLIGHTS

Pedestrians

- Discrepancies between pedestrian and automobile
- Legal attitudes toward pedestrian accidents
- Drivers' responsibility toward pedestrians
- Pedestrian types
  - Child, teen-ager, adult, senior citizen

Pedestrian problem behavior

- Drunkenness, inattention, illness, poor eyesight, deafness, loss of agility

Cyclists

- Motor Vehicle Laws affecting cyclists
- The driver and the bicyclist
- The driver and the motorcyclist

AUDIO-VISUAL AIDS

The Invisible Circle (49) 17 min.

STUDENT ACTIVITIES

DISCUSSION

What should be done by pedestrians and cyclists to help driver avoid accidents.

Reasons why courts generally favor the pedestrian in a law suit arising from an accident.

CLASS PROJECTS

Compile a code of behavior for pedestrians and one for bicyclists. Make copies for posting on school bulletin boards.

INDIVIDUAL PROJECTS

Write a 300-word essay on the responsibilities of pedestrians toward drivers.

Unit 10: The Automobile

Recommended Time: 2 Periods *Recommended Week:* Fifth

OBJECTIVES

Students should recognize and know the names and locations of the principal components of the automobile. They should also know the basic principles of operation of the units and their relationship to safe driving.

SYNOPSIS

This unit teaches the names, locations, and purpose of each of the principal operating units of the automobile. It discusses the component parts of each unit, the operation, and relationship to driving.

TEACHING HIGHLIGHTS

Automobile chassis
Engine
Electrical system
Fuel system
Cooling system
Lubricating system
Exhaust system
Clutch
Transmission
  Standard
  Automatic
Drive line
Rear axle and differential
Front suspension system
Steering gear
Brakes
Emission-control devices

STUDENT ACTIVITIES

DISCUSSION

The sequence of events which compose the Otto cycle. What engine parts are in use for this?

Advantages and disadvantages of standard and automatic transmissions.

The effects of abusing the clutch, fast starts, panic braking on the automobile.

The relationship of good driving to low cost of car operation.

Environmental benefits of sound car maintenance.

CLASS PROJECTS

Prepare or obtain charts or pictures of various types of engines. Compare advantages and disadvantages of each. Conduct a contest, using two teams, on names and functions of automobile parts.

INDIVIDUAL PROJECTS

Draw a diagram of a workable ignition system.

Make chart showing flow of fuel from tank to engine.

AUDIO-VISUAL AIDS

ABC of the Automobile Engine (21) 15 min.
ABC of Internal Combustion (21) 13 min.
Mechanics of the Car (25) 30 min.
Automatic Transmissions (20) 13 min.

Unit 11: Automobile Instruments and Controls

Recommended Time: 1 Period *Recommended Week:* Sixth

OBJECTIVES

Students should be able to identify correctly and use all instruments, indicators, and controls in the driver's compartment. They should know and be able to make all pre-driving safety checks.

SYNOPSIS

This unit locates, identifies, and gives the function of each instrument on the panel. It tells the normal indications and what to do if abnormal indications show on the instruments. It points out, identifies, and discusses the function of all controls.

TEACHING HIGHLIGHTS

Instruments: identification and purpose
- Fuel gauge
- Temperature gauge
- Oil pressure gauge
- Ammeter
- Speedometer-odometer
- High-low light beam indicator
- Parking brake indicator
- Tachometer (optional)

Instrument readings
- Normal, abnormal

Controls: location, purpose
- Ignition switch
- Selector lever-gear shift
- Parking brake
- Clutch
- Foot brake
- Accelerator

Windshield wiper-washer

Light and dimmer switches

Heater-defroster controls

Steering wheel

Horn, mirrors

Directional signal lever

Emergency flasher control

Seat adjustment, seat belt

STUDENT ACTIVITIES

DISCUSSION

The ways instruments and controls help you in your driving. Could you drive properly without them? Explain.

Advantages and disadvantages of using "idiot lights" instead of indicating instruments.

The purpose of the safety features on modern cars.

The use of seat belts.

CLASS PROJECTS

Have committees formed. Bring in folder for all makes of new cars. Compare instruments, controls, safety features.

INDIVIDUAL PROJECTS

Draw a labelled diagram showing the instruments and controls in your family car. Give make, year, and model of car.

Unit 12: Using the Controls

Recommended Time: 1 Period *Recommended Week:* Sixth

OBJECTIVES

Students should know the theory of the correct methods of using the controls. They should be able to discuss procedures in preparing to drive, starting the engine, moving the car forward in a straight line.

SYNOPSIS

This unit discusses step-by-step procedures in getting ready to drive, starting the engine (both automatic transmission and standard shift), moving the car, controlling the steering wheel, decelerating, and stopping both standard shift and automatic transmission-equipped cars.

TEACHING HIGHLIGHTS

Preparing to drive
- Safety checks

Starting engine
- Cold engine-automatic, standard
- Warm engine-automatic, standard

Moving the car
- Observation
- Signaling
- Shifting: automatic, standard
- Releasing parking brakes
- Accelerating

Driving in a straight line
- Control of steering wheel
- Control of accelerator
- Shifting (standard only)

Decelerating and stopping
- Automatic
- Standard

AUDIO-VISUAL AIDS

Safe Driving: Fundamental Skills (16) 13 min.
Your Driving Habits (13) 16 min.

STUDENT ACTIVITIES

DISCUSSION

The advantages of learning proper driving methods from the beginning.

What are the advantages of learning to drive on an automatic shift car rather than on standard shift? The necessity for learning the use of hand signals when all cars are now equipped with directional signals.

CLASS PROJECTS

Investigate procedures used by veteran drivers of both standard shift and automatic transmission-equipped cars. Do their methods agree with what you have learned?

INDIVIDUAL PROJECTS

Write a 200-word essay making a comparison of the skills learned in a sport. Discuss environmental effects of gentle acceleration, deceleration, and braking.

Unit 13: Maneuvers with the Automobile

Recommended Time: 4-6 Periods *Recommended Week:* Sixth-Seventh

OBJECTIVES

Students should know, in theory, the correct techniques and procedures of turning corners, backing, turning around, angle and parallel parking, parking on hills, stopping, and approaching and crossing intersections.

SYNOPSIS

This unit describes in detail the proper procedures of turning right-hand and left-hand corners, "U" turns, side-street turn arounds, and "Y" turns. It describes procedures used for angle parking, parallel parking, and parking on hills. Parking and turning rules and regulations and stopping and starting on an upgrade are discussed.

TEACHING HIGHLIGHTS

Turning right and left corners
- One-way streets, two-way streets, multi-lane streets
- Approach procedure (auto. trans.)
- Approach procedure (std. trans.)
- Turning procedure
- Right turns
- Left turns, one- and two-way streets
- Multi-lane streets
- Recovery procedure (auto. trans.)
- Recovery procedure (std. trans.)

Backing
- Preparation
- Backing (auto., std.)
- Straight
- Around curves

STUDENT ACTIVITIES

DISCUSSION

Difference in techniques between left turns and right turns.

What special safety precautions are necessary on left turns?

What difficulties might be present if hand-over-hand steering is not used, or is improperly used?

The differences in maneuvering with automatic and standard transmission.

Safety measures when backing.

CLASS PROJECTS

Prepare a wall chart of a table-top driving area with intersections, one- and two-way streets, backing and parking areas; include all signs and signals.

INDIVIDUAL PROJECTS

Draw diagrams for each of the following turns:

Rt. turn; L turn into 2-way street from 2-way street; L turn from one-way into 2-way; L turn, one-way streets into one-way streets.

TEACHING HIGHLIGHTS	STUDENT ACTIVITIES
Turning around Pertinent traffic rules "U" turns Approach procedure Turning procedure "Y" turns Approach procedure Turning procedure Turning using a side street Parking Regulations Angle parking: "drive-in" Approach procedure Parking Leaving parking space Angle parking: "back-in" Approach Parking Leaving space	DISCUSSION Traffic rules governing turning around. How does Traffic Dept. determine areas where turns are ruled illegal? The term "steering anticipation": its meaning; its advantages. The reason for using angle parking; the relative merits of "drive-in" vs. "back-in." CLASS PROJECTS Make a survey of the school area. Make a map showing safe areas for "U" turns and "Y" turns, also areas where turning around is prohibited. INDIVIDUAL PROJECTS List step-by-step procedure used for correct "U" turn, also for correct "Y" turn.
Parallel parking Judging size of parking space Approach procedure Parking procedure Leaving the parking space Parking on hills Facing uphill curb Facing downgrade curb Up- or downhill without curb Starting and stopping on an upgrade	DISCUSSION The importance of the proper approach to the parking space. Why signal? Detailed parking procedure. What changes in the procedure would you make if you were driving a large car? Why is it important to be able to stop and start properly on an upgrade?
AUDIO-VISUAL AIDS Parking the Car (20) 10 min. Backing Into a Stall and Skills on Hills (25) 16 min.	INDIVIDUAL PROJECTS List step-by-step procedure for parallel parking and for parking on hills. What additional precautions must be used for the latter type of parking?

Unit 14: Driving in Rural and Residential Areas

Recommended Time: 2-3 Periods *Recommended Week:* Seventh

OBJECTIVES

Students should know and identify various sensory stimuli perceived in the driving situation, and the driving techniques to be used. They should be aware of the possible problems confronting them and be able to select the correct responses.

SYNOPSIS

This unit discusses techniques needed for driving in rural and residential areas. Important factors, such as speed, visibility range, side visibility, pedestrians, etc., are considered. Problems in these areas are considered and appropriate measures are given. Safety and correct judgment are emphasized.

TEACHING HIGHLIGHTS

Rural areas

- Nature of terrain
- Road surface, width, contour
- Visibility range-front, side
- Visibility of side roads and intersections
- Use of and observance of signs and signals
- Speed limits
- Driving on hills, straightaways, and curves
- Consideration for other users of the highway
- Following other vehicles
- Passing markings
- Road markings
- Alertness, observation, and judgment
- Avoiding accident situations in the making
- Adjusting speed to conditions
- Railroad crossings; bridges
- Car trouble on the road

STUDENT ACTIVITIES

DISCUSSION

The proper driving methods on a winding road; on a road over undulating terrain. What safety precautions would you use?

The proper measures if you are driving on a rural highway and a herd of cattle is moving toward you.

CLASS PROJECTS

Investigate the latest New York State Traffic Accident Report. Find out what percentage of accidents occur on straight roads, hills, intersections.

Investigate tailgating as an accident cause.

What percentage of New York State accidents result from tailgating?

INDIVIDUAL PROJECTS

Make a list of rules of the road which are especially important when driving in rural areas.

TEACHING HIGHLIGHTS

Residential areas
- Types of streets
  - 1-way, 2-way, limited width

Driving hazards
- Limited visibility at intersections
- Blind driveways
- Parked cars
- Children and pedestrians

Critical areas
- School zones, parks, playgrounds

Driving techniques
- Road position of car on 1-way and 2-way streets
- Speed judgment
- Observance of signs and signals
- Proper use of horn
- Emergency vehicles

Audio-Visual Aids

Signs of Life (44) 11 min.

STUDENT ACTIVITIES

Discussion

"It is easier to drive in a residential area than in highway traffic." Do you agree? Why or why not?

The N.Y. State M. V. Law concerning "Stop" signs. Reasons why zone of observation should extend from house line to house line in residential areas.

Road position on one-way streets. Why is it important?

Class Projects

Construct a map of residential areas near the school. Show location of all potential hazards, traffic signals and signs near schools, parks, and playgrounds.

Individual Projects

Make a list of traffic ordinances and rules of the road which need special attention when driving in residential areas.

Unit 15: Driving in Traffic

Recommended Time: 2 Periods *Recommended Week:* Eighth

OBJECTIVES

Students should know area traffic rules and be familiar with the traffic flow pattern and with area traffic control devices. They should be prepared to identify various traffic problems and to act on stimuli received in such a way as to avoid these problems and proceed safely to destination.

SYNOPSIS

This unit discusses special skills and techniques needed in city driving. Traffic control systems, special devices, etc., are considered as well as the major hazards encountered in heavy traffic.

TEACHING HIGHLIGHTS

Prerequisite: ability to observe and recognize dangerous situations in the making; prompt accurate judgment, readiness to react

Necessity for constant alertness and careful observation

Problems and hazards
- Large numbers of other vehicles
- Pedestrians; safety zones
- Public transportation
- One-way streets
- Double parked vehicles
- Different traffic control systems
- Special traffic flow routes; reverse flow
- Poor visibility at intersections
- Multi-lane streets with special turning lanes
- Right-of-way situations
- Emergency vehicles; school buses

Special driving techniques
- Speed control
- Following and merging
- Night city driving

STUDENT ACTIVITIES

DISCUSSION

Reasons for constant alertness in city traffic.

Differences in and uses of various traffic light systems; advantages and disadvantages.

What should be done about parking violations?

Compare the N. Y. State school bus law with that of N. Y. City. How do they differ? Why?

CLASS PROJECTS

Make a survey of the traffic areas near the school.

Where parking violations are constant, suggest remedies.

INDIVIDUAL PROJECTS

Make a list of important safe-driving practices in city traffic.

Make a list of special driving hazards in city traffic areas.

Unit 16: Expressway and Highway Driving

Recommended Time: 2 Periods *Recommended Week:* Eighth

OBJECTIVES

Students should be familiar with accepted techniques in expressway driving. They should be able to read a road map, interpret it correctly, and plan an extended trip.

SYNOPSIS

This unit includes techniques on entering and leaving expressways, maintaining speed, following distance, passing, deceleration, safety, making route changes, adding interchanges, and the correct use of acceleration lanes. It also includes planning trips, how to read road maps, and what to do in case of road trouble.

TEACHING HIGHLIGHTS

How to enter expressways
- Using acceleration lanes
- Changing to traffic lanes
- Observing and signaling

Driving on expressways
- Maintaining speed
- Following distance
- Taking periodic "breaks"
- Passing techniques
- Using route and traffic interchanges

Leaving expressways
- Moving to deceleration lane
- Reducing speed to conform with normal area special limits

Planning a trip
- Reading road maps
- Noting legends

AUDIO-VISUAL AIDS

Driving the Superhighways (20) 10 min.
Freeway Driving (26) 11 min.
Freeway Driving Factors (11) 16 min.
Multiple-lane Traffic (44) 17 min.

STUDENT ACTIVITIES

DISCUSSION

Differences in driving on rural highways and expressways. Which is more difficult? Why?

Methods of estimating following distance. Why is it important to maintain safe distance?

Driving errors made on entering or leaving expressways.

CLASS PROJECTS

Have each student bring in a N. Y. State road map.

Have the class plan a 1000-mile trip to visit points of interest in the state.

Include mileage from place to place. Calculate expenses.

INDIVIDUAL PROJECTS

Make a list of ways to avoid fatigue when driving on expressways.

List the steps, in order, of passing procedure.

Give reasons for each step.

Unit 17: Driving Under Adverse Conditions

Recommended Time: 2 Periods *Recommended Week:* Eighth-Ninth

OBJECTIVES

Students should be familiar with various techniques for driving under adverse conditions. They should know the corrective measures: in the event of skidding, how to drive in mud, sand, or snow, on ice or through deep water. They should know what preparations to make, equipment to carry, and devices to use under any of these conditions.

SYNOPSIS

This unit discusses proper techniques and precautions for driving at night, in rain or fog, snow or ice, sand, mud, deep water, mountain and desert country, and rough roads. Proper preparations are listed, and corrective measures are taught for driving under these adverse conditions.

TEACHING HIGHLIGHTS

Night driving
- Preparation: lights, windshield
- Reduce speed; drive within light range
- Use of lights: avoiding glare
- Increased alertness and observation

Driving in rain
- Reduced traction; hydroplaning
- Proper use of steering, accelerator and brakes
- Windshield wipers, lights, defrosters
- Skidding: avoidance, recovery
- Increased following distance
- Car trouble in the rain

Driving in fog
- Visibility problems: use of reflectant road markers or lines
- Use of lights: fog lights
- Speed reduction

AUDIO-VISUAL AIDS

Driving at Night (20) 10 min.
Driving under Special Conditions (20) 19 min.
Sliding for Safety (54) 21 min.
Winter Driving (21) 25 min.

STUDENT ACTIVITIES

DISCUSSION

Compare daytime and nighttime driving as to techniques, dangers, advantages, and disadvantages.

Effects on driving techniques of the early period of a rain storm or snow storm on black top or concrete. Explain oil film, slick pavement.

CLASS PROJECTS

Visit 3 gas stations, 3 garages, and 3 auto supply dealers. Compare prices of snow tires and chains. Why is one purchased more than the other? Discuss.

INDIVIDUAL PROJECTS

Write a 300-word report on driving in rain, snow, or fog. How can you compensate for lack of visibility or lack of traction?

TEACHING HIGHLIGHTS

Driving on snow or ice

- Reduced traction—snow tires or chains
- Car handling techniques: speed, braking, steering, acceleration, shifting
- 30° danger point
- Following distance, stopping distance
- Skid procedure: car stuck in snow
- Equipment kept in car in winter

Driving in sand, gravel, mud, deep water, drying out brakes

Driving in mountain and desert country

Preparing car for trip

Effect of altitude and temperature on engine performance

Brake and gear techniques on hills

Spare oil, water, gas for desert trips

Sand storms, car trouble in desert

Rough roads: speed control

STUDENT ACTIVITIES

Discussion

Special techniques and precautions when driving on snow or ice.

How to free a car stuck in snow.

Special problems when driving in mountains or desert.

Special preparation for this kind of driving.

Class Projects

Visit several collison shops to check on accidents. How many happened on slippery pavement?

Individual Projects

Write a paper on the causes of "vapor lock," its remedies, and how to prevent it.

Unit 18: Defensive Driving

Recommended Time: 2-3 Periods *Recommended Week:* Ninth

OBJECTIVES

Students should learn the IPDE principle of defensive driving. They should know the operational techniques and how to apply them to avoid accident situations.

SYNOPSIS

This unit discusses the IPDE principle, defines defensive driving, discusses the qualities of a defensive driver, and details various techniques of driving defensively.

TEACHING HIGHLIGHTS

Defensive driving—definition

IPDE principle: identify, predict, decide, execute

Qualities of a defensive driver: mature attitude and judgment, ability to make quick, correct decisions, alertness, good observation, driving skill

Fine points of the Smith System

Defensive driving habits

- Keep safe following distance
- Yield right of way
- Signal properly and consistently
- Be alert for other drivers
- Keep safe, reasonable speed
- Have car under control
- Think ahead

Audio-Visual Aids

The Smith System (20) 8 min.
Defensive Driving Tactics (11) 15 min.
Defensive Driving (54) 30 min.

STUDENT ACTIVITIES

Discussion

Application of the IPDE principle to all driving.

The Smith System: use traffic situations to illustrate points. Can you add any rules to the Smith System?

"The defensive driver is seldom involved in an accident." Is this true? Why or why not?

Class Projects

Make simple sketches to illustrate defensive driving techniques for the school bulletin board.

Write a series of short articles for the school paper, each discussing a defensive driving rule.

Individual Projects

Make a list of rules for defensive driving that you think should be added to the Smith System.

Unit 19: Minimizing Consequences of Collisions

Recommended Time: 3-4 Periods *Recommended Week:* Ninth

OBJECTIVES

Students should be able to identify elements of safe vehicle packaging, safe highway and vehicle design; they should be able to select collision alternatives to minimize injury or damage. They should also be familiar with the use of available passenger restraints.

SYNOPSIS

This unit deals with the minimizing of consequences of collision through safety packaging, restraints, highway and vehicle design and with minimizing collision consequences through decision and actions of the driver.

TEACHING HIGHLIGHTS	STUDENT ACTIVITIES
Minimizing collision through proper packaging: popout windshields, collapsible steering columns, safety instrument panels and sun visors, design of controls, structural strength of vehicle, highway and vehicle engineering and design	DISCUSSION Advantages and disadvantages of safety packaging.
Separating collision alternatives in order of ascending danger: sideswipe, rear-end collision, collision with fixed object, head-on collision	Merits of various seat belts and air bags.
Compromise selection of alternatives. Where one or more collision alternatives exist, select that likely to result in minimum of injury or damage	Latest safety features of modern highways. Best alternatives for minimum damage in each situation described in motion pictures or filmstrips

Unit 20: Accidents

Recommended Time: 1-2 Periods *Recommended Week:* Ninth

OBJECTIVES

Students should know the correct procedure in an accident: information to get, how and to whom to report the accident.

SYNOPSIS

This unit gives details of correct procedure in case of accident: care of injured, notifying authorities, exchange of necessary information with others involved, getting witnesses' names and addresses and instructions on completing an accident report.

TEACHING HIGHLIGHTS

Accidents: chances of being involved—1 in 10 in N. Y. State

Responsibility for accidents: 90% human error; 9 out of 10 could be avoided

Accident hazards: pedestrians, motorcycles, bicycles, trucks or buses, other cars, animals, farm equipment, out-of-date road facilities

Accident prevention
- Education engineering enforcement, improved safety features in cars

Procedure in case of accident
- Care for injured
- Notify authorities

Exchange information with others involved; witnesses

Report to insurance company

Report to M.V. Dept.

AUDIO-VISUAL AIDS

Accident Behavior (44) 20 min.
The Invisible Circle (49) 17 min.
Pedestrians (20) 10 min.
The Unexpected Moment (58) 12 min.

STUDENT ACTIVITIES

DISCUSSION

The causes of accidents to teenagers. Give recommendations to reduce these accidents.

Explain "Last Clear Chance."

Formulating a code of pedestrian behavior to be publicized in the school.

CLASS PROJECTS

Secure accident report forms. Give specifications of accident and have them complete reports using the information given.

INDIVIDUAL PROJECTS

Collect ten pictures of accidents. List the ways each accident might have been prevented

Unit 21: Highway Safety Through Traffic Controls and Engineering

Recommended Time: 1-2 Periods *Recommended Week:* Ninth-Tenth

OBJECTIVES

Students should be familiar with advances in safety engineering in automobiles, the latest pollution-control devices, and the methods and devices used by highway engineers to improve highway safety.

SYNOPSIS

This unit discusses how municipalities use traffic control devices for the safe flow of traffic, how checks and surveys are made of critical spots to improve situations, and how provisions are made for pedestrians. It also discusses how modern methods of highway engineering are applied to highway construction to increase safety.

TEACHING HIGHLIGHTS

Traffic control devices

- Signal devices
  - Automatic cycling traffic lights
  - Types: lamp color position
  - Flasher signals: traffic control, road hazard signal
  - Traffic signs
  - Road markings
  - Pedestrian signals
  - Closed TV traffic view systems

Locating and remedying accident "hot spots"

Safety Through Highway Engineering National Highway Safety Act 1966

Modern highway design

Divided highways, limited access highways, interstate expressways

Rotaries, interchanges, channelizing islands

Pedestrian safety devices: islands, overhead crosswalks, underpasses

Road lighting and marking

Protective guard rails, malls, etc.

Emergency parking, rest areas.

Emissions monitor for detection of dangerous pollution levels in areas of high pollution—as tunnels.

STUDENT ACTIVITIES

DISCUSSION

Advantages of automatic traffic lights: types and uses. When could these lights be a hindrance?

Influence of the National Highway Safety Act on highway safety, on driver education.

CLASS PROJECTS

Make a study of the traffic at several busy intersections in your area. What suggestion can be made to improve traffic flow and safety.

INDIVIDUAL PROJECTS

Make a report on traffic signs or signals in your neighborhood. List those which are not clearly visible or, in your opinion, should be relocated. Give reasons.

Unit 22: Buying and Maintaining a Car

Recommended Time: 2 Periods *Recommended Week:* Tenth

OBJECTIVES

Students should be familiar with procedures for buying a car: laws applying to its purchase, most advantageous methods of financing, and maintenance procedures to increase its life and safety.

SYNOPSIS

This unit deals with the many aspects of buying a new or used car—how to select, precautions to take, insurance. It also discusses maintenance, both that which can be done by the owner and that which must be done by a professional mechanic.

TEACHING HIGHLIGHTS

Buying a new car
- Selecting: kind and type, price range, cost of upkeep
- Where to buy: dealer reputation for reliability and service
- How to buy: cash or installment buying; how to make a loan
- Precautions to take before signing car contract

Buying a used car
- Where to buy: friends, new car dealer, used car dealer
- Selecting: kind, price range, upkeep, condition, mileage
- Precautions: road test car with your own mechanic; make sure contract suits; check mechanical items, terms of guarantee, ownership title

Automobile insurance
- State minimum requirements
- Approximate cost in New York City
- Additional coverage

STUDENT ACTIVITIES

DISCUSSION

Features of various new cars: appearance, price, performance, economy—other desirable features.

Terms of new car warranty. Does this protect the buyer properly?

The best way to borrow money for a new or used car.

CLASS PROJECTS

Make a survey of insurance brokers. Compile a list of coverage costs for liability, property damage, fire and theft, collision, medical protection, and uninsured driver protection.

INDIVIDUAL PROJECTS

Prepare an itemized expense sheet for maintaining your family car for a year. Include all expenses.

TEACHING HIGHLIGHTS

Maintaining your car
- Safety maintenance
  - Tires, brakes, steering, lights, horn, windshield wipers, defrosters
  - Periodic checks of condition
- Maintenance for efficiency and economy
  - Lubrication, oil changes, oil filter, cartridge changes, P.C.V. check
- Battery and electrical system
  - Cooling system: summer, winter
  - Fuel system: filters, operation
  - Engine tune-up: ignition, etc.
  - Replacement of sparkplugs and points periodically
  - Clutch, transmission, and rear axle care
  - Body maintenance
  - State automobile inspection law

STUDENT ACTIVITIES

Discussion

Major causes of tire wear. Explain what should be done to minimize tire wear.

The best ways to get the greatest mileage from the fuel you buy. Do any of these methods contribute to safety? How?

Class Projects

Visit inspection station in your neighborhood. Make lists of items inspected. Discuss these in terms of safety, economy, and performance of the car.

Individual Projects

Make a list of bad driving habits which add to the expense of upkeep of a car. List the preventive routine you would follow.

Unit 23: Vocational Opportunities for Drivers

Recommended Time: 1 Period *Recommended Week:* Tenth

OBJECTIVES

Students should be familiar with employment opportunities for licensed drivers: types of driving licenses and the driving privileges of each.

SYNOPSIS

This unit lists and discusses various fields of employment for drivers, both professional and nonprofessional.

TEACHING HIGHLIGHTS

Professional drivers
- Definition; types of licenses, requirements for each
- Areas of employment
  - Truck drivers: local and interstate
  - Taxicab drivers
  - Bus drivers
  - Fire, police, and other municipal departments
  - Construction equipment operators

Nonprofessional drivers
- Definition
- Areas of employment
  - Service trades: auto mechanics, TV repairmen, etc.
  - Salesmen
  - Physicians
  - Traffic control and enforcement personnel
  - Military service personnel

STUDENT ACTIVITIES

DISCUSSION

Opportunities offered by commercial driving jobs. Do you think you would like to follow this career?

Jobs requiring driving skill that are open to women.

CLASS PROJECTS

Investigate and report on training and tests given to drivers at large interstate trucking companies. Compare with the road test given by the Motor Vehicle Department.

Practice Driving Instruction

Except for a few group demonstration lessons, such as how to use the controls, turning around, parking or signaling, practice driving instruction is one of the most highly individualized forms of teaching. Student perceptions of situations and their reactions to the moving automobile they are guiding are so widely varied that the instructor must be able to adapt his teaching to each student. An approach and a method of instruction for a given operation that is successful for one student may not be useful to another. The rate of progress of the individual student also varies. Therefore, the instructional guide for practice driving presented here does not suggest that a given instructional phase be completed in a prescribed time. Instead, the teaching objectives are listed in logical order accompanied by skills or techniques. The important criterion is, of course, that the student show proficiency in a particular area before being introduced to more complicated skills, techniques, or situations. It is also just as important that the instructor see evidence of desirable attitude development, along with skills acquired, before progressing further.

As has been mentioned previously, an important phase of the practice driving instruction is keeping a record of student progress. One method suggested is the use of the individual student practice record card on which errors made each lesson are noted. This method gives the instructor information which he can use during the next lesson to correct the errors. It also reveals the formation of objectionable habit patterns which the instructor can correct before they become firmly fixed. Further, it becomes an automatic progress chart because, as the student's proficiency increases, fewer notations of errors are shown, until, near the end of the course, almost no notation will have to be made.

Two personal qualities are most essential to the Driver Education instructor for success in on-the-road instruction. These are patience and calmness. Without these qualities, an instructor is badly handicapped, and often unsuccessful in his teaching. Impatience and perturbation will quickly communicate themselves to the student, upsetting him to such a degree that he becomes incapable of driving. Further, such a situation can cause the other students in the car to become nervous and do poorly when they drive.

When the instructor teaches a new technique, he gives a clear explanation of the process and skills to be learned, together with reasons for executing the operation in a particular way. After making sure that all students understand what is expected, he then demonstrates the process slowly so that all can see what is happening. At the conclusion of this demonstration, he should question the students to determine whether they grasped all phases of the process, and if necessary, repeat the demonstration.

Note that the demonstration and immediate questioning are tests of students' powers of observation, a very important quality which they must develop if they are to become safe drivers.

When the instructor is satisfied that the students show a grasp of what has to be done, he then allows one to practice the maneuver. It is good policy to coach the student through his first attempts on a step-by-step basis, making sure that all others in the group are watching and listening. Remember to keep the pace of the initial efforts slow enough to allow the student time to think about the stages of the operation as he reaches each one. After he shows sufficient evidence of acquiring the necessary skills, he may speed up the maneuver gradually until he is performing at the same rate of speed as an experienced driver. During the practice-learning phase, the students watching can also be kept alert to all phases of the maneuver by strategic questioning as to what errors they saw, and what should have been done. After each practice interval, the instructor records the student's achievement, either by the error-check method or by some other method he prefers. As the practice continues, the instructor notes the beginning of any adverse or dangerous habit patterns and promptly corrects them.

If the practice driving instructor is not the instructor for classroom work, it is very important that a close liaison be established between on-the-road work and classroom work. One way of doing this would be for the practice driving instructor to give a list of the important errors, especially if they appear common to several students, to the classroom instructor for discussion and emphasis on the correct techniques. The process can also work in reverse. Another way would be for the both instructors to hold conferences frequently and discuss situations which appear to be problems.

As with other subjects, a plateau and even a retrogressive period may appear. Such a situation requires reteaching and often a different

approach. The instructor's patience may be taxed. However, the instructor's persistence will almost always produce success, and frequently, the student will make further progress much faster than might be expected.

When the student has achieved proficiency in a given maneuver, performance tests should be conducted. His achievement should be rated on the basis of ease, smoothness, speed, safety, and, of course, absence of error in carrying out all the steps of the maneuver. Frequently, these limited performance tests can be expanded to include skills and processes previously learned so that the test also becomes review practice. The tests may be further refined by allowing the students watching to mark the student driver. This will test their observation. For convenience, the instructor may make up mimeographed forms of performance tests for various areas of practice driving instruction, and distribute them for use when the occasion warrants.

The practice driving instructional guides which follow are arranged according to the major instructional areas. The specific skills and techniques to be learned are listed under Student Objectives. The heading Teacher Orientation lists suggestions for teaching the topics, the best locations for practicing a particular skill, special methods, safety precautions, special teaching aids, etc.

Practice Driving Instructional Guides

Guide No. 1

INSTRUCTIONAL AREAS:

Safety Checks Before Entering Car

Interior Checks and Adjustments After Entering

TEACHER ORIENTATION:

Use off-street area such as school courtyard, driveway, or parking lot. Students are not permitted on highway until they have mastered this material.

STUDENT OBJECTIVES:

Students should learn:

Safety Checks Before Entering Car

Check tires visually for condition and inflation

Check engine dipstick for oil level

Check cooling system level; fasten hood securely

Clean windows and windshield, lamp lenses front and rear

Check surrounding area over which car may travel; it should be clear of debris

Interior Checks and Adjustments After Entering

Enter from curb side unless in parking lot or driveway

Clear any obstructions from rear package rack that may interfere with visibility

Check and adjust front seat, inside and outside mirrors

Fasten and adjust seat belts snugly

Check doors and door latches for secure fastening

Adjust windows for best ventilation

Guide No. 2: PRACTICE DRIVING

INSTRUCTIONAL AREAS:

Familiarizing Students with Gauges and Controls

Starting Engine on Car Equipped with Automatic Transmission

TEACHER ORIENTATION:

Use off-street location. If weather is warm, cold engine starting may be difficult to demonstrate. However, important techniques may be discussed.

STUDENT OBJECTIVES:

Students should be familiar with:

Guages and Controls

Locations and functions of all gauges on instrument panel

Location and function of all telltale lights

Normal appearance of gauges—engine stopped

Normal appearance of gauges—engine running

Normal appearance of telltale lights—engine stopped, running

What to do if gauge or telltale light readings are abnormal

Location, purpose, and method of using all controls

Starting Engine (Automatic Transmission)

With parking brake on, be sure selector lever is in "Park"

Press accelerator to the floor and release 2 or 3 times; then hold pedal at ¼ open position

Turn ignition switch to "Start" position; hold until engine starts; then release

Release accelerator pedal. Engine will run at fast idle position until warm

Engine Warm

Press accelerator down to ¼ open position and hold

All other above procedure is the same

When accelerator is released after engine starts, engine will run at slow idle

Guide No. 3: PRACTICE DRIVING

INSTRUCTIONAL AREAS:

Checking Controls

Using Shifting Lever and Clutch (Standard Transmission)

Starting Engine (Standard Transmission)

TEACHER ORIENTATION:

Use off-street areas. Students using manual shift cars should not be permitted on highway until they show proficiency in these areas.

STUDENT OBJECTIVES:

Students should be familiar with:

Checking Controls (Standard Transmission)

Check clutch pedal play

Check shifting lever for "Neutral" position

Using Shifting Lever and Clutch

Learn shifting pattern

Learn correct hand position when shifting

Learn correct clutch pedal action when shifting

Learn coordination of clutch pedal and accelerator action during and after shifting

Learn position of lift foot when not using clutch

Starting Engine (Standard Transmission)

Keep the gearshift lever in "Neutral" and the parking brake on

Depress clutch pedal and hold while starting engine

Accelerator techniques are the same as with automatic transmission for cold and warm engine

Ignition switch operation is the same as for car equipped with automatic transmission

Release accelerator and clutch pedals when engine starts

Guide No. 4: PRACTICE DRIVING

INSTRUCTIONAL AREA:

Moving Car Ahead in a Straight Line (Automatic Transmission)

TEACHER ORIENTATION:

Demonstrate steering, observation, signaling, and accelerator techniques. Discuss pertinent traffic regulations. Use off-street area or quiet street.

STUDENT OBJECTIVES:

Student should be able to execute the following satisfactorily:

Preparation

Preliminary checks (review)

Engine starting procedure (review)

Leaving Curb

Preparatory procedure (brake, shift, signal)

Observation procedure, (inside and outside mirrors; look over left shoulder)

Steering (left until clear, then right, then straight)

Acceleration (increase speed to that of any surrounding traffic, then level off)

Driving Straight Ahead

Steering skills: keeping car in right lane, keeping car in straight line, deviating to avoid objects in path of vehicle

Speed control: proper use of accelerator to control speed

Observation techniques: looking well ahead of car; keeping eyes moving to see everything; using mirrors frequently to check areas to the rear

Using controls: learning to find and use controls by touch; keeping eyes on the traffic picture.

Guide No. 5: PRACTICE DRIVING

INSTRUCTIONAL AREAS:

Stopping the Car (Use of Brake in Various Situations)

TEACHER ORIENTATION:

Demonstrate normal, rapid, and emergency stops. Do not allow students to attempt emergency stops for practice until they are advanced. Use hand signals for all except emergency stops. Repeat practice for normal stops until students show accurate control.

STUDENT OBJECTIVES:

Students should be able to differentiate among the following situations and execute each maneuver properly.

Normal Stops

Preparatory procedure: observation in mirrors, signal, accelerator release, right foot on brake pedal

Braking procedure: gradual increase in pedal pressure until desired deceleration rate is reached

Easing of pressure just before car comes to a complete halt to avoid forward surge of car and passengers

Rapid Deceleration

Preparatory procedure as above

Braking procedure: considerably more braking force applied to

slow car rapidly and halt it within desired distance; avoiding locked wheels

Steering procedure: moving wheel as necessary to hold car in straight line

Emergency Stops

Brake hard immediately; *avoid locking wheels*

Steer as necessary to avoid collision

Guide No. 6: PRACTICE DRIVING

INSTRUCTIONAL AREA:

Backing the Car

TEACHER ORIENTATION:

Use off-street area for beginning practice if possible. Stanchions or boxes may be used to set up a pattern. Stress backing speed and observation. Discuss pertinent traffic regulations.

STUDENT OBJECTIVES:

Students should be familiar with regulations governing this operation. Students should be able to execute maneuvers satisfactorily, using proper techniques.

Straight-line Backing

Body position on seat

Selector lever position: reverse

Hand position on steering wheel

Warning signal: horn tap

Accelerator control: back slowly

Head and eye movement for best observation

Steering control

Backing Around Objects

Body position

Hand position on steering wheel

Amount of steering needed

All other procedure as in straight-line backing

Guide No. 7: PRACTICE DRIVING

INSTRUCTIONAL AREA:

Making Right Turns

TEACHER ORIENTATION:

Use quiet streets for this practice at first. Explain and demonstrate: hand signals, signal timing, hand-over-hand steering, amount of steering needed to turn corner, steering timing, steering recovery. Discuss pertinent traffic regulations.

STUDENT OBJECTIVES:

Students should know rules and techniques governing this procedure. They should be able to execute this maneuver satisfactorily.

Preparation for Turn

- Observation
- Signals (hand and electric)
- Moving to proper lane
- Deceleration to 10 mph
- Observation at intersection before turning

MAKING THE TURN

- Steering timing
- Hand-over-hand steering techniques
- Proper amount of steering to make turn in the proper lane
- Speed control
- Observation while turning
- Steering speed

Recovery from Turn

- Timing steering recovery
- Recovery techniques: power steering, manual steering
- Acceleration to normal speed after recovery
- Lane change if necessary

Guide No. 8: PRACTICE DRIVING

INSTRUCTIONAL AREA:

Making Left Turns from a One-Way Street to a One-Way Street.

TEACHER ORIENTATION:

Demonstrate type of turn. Emphasize signaling, observation, right-of-way rules, safety. Discuss pertinent traffic regulations.

STUDENT OBJECTIVE:

Students should know rules and techniques governing this procedure. They should be able to execute the operation properly.

Making Left Turns from a One-Way Street to a One-Way Street

PREPARATION

- Observation
- Signaling
- Lane change
- Deceleration to 10 mph
- Observation at intersection before turning

MAKING THE TURN

- Steering techniques
- Speed control
- Observation while turning

RECOVERY

- Recovery timing and control to hold road position in left lane
- Acceleration to normal speed after recovery

Returning to Right-hand Traffic Lane

- Observation
- Signaling
- Lane changing
- Check signal for cancellation

Guide No. 9: PRACTICE DRIVING

INSTRUCTIONAL AREA:

Making Left Turns from a One-Way Street to a Two-Way Street

TEACHER ORIENTATION:

Same as for Guide No. 8

STUDENT OBJECTIVES:

Same as for Guide No. 8

Making Left Turns from a One-Way Street to a Two-Way Street

PREPARATION

Same as for previous left turn

MAKING THE TURN

Right of way
Position for beginning the turn
Steering techniques
Road position in turn
Speed control
Observation while turning

RECOVERY

Recovery timing and control to maintain proper lane
Acceleration to normal speed

Returning to Right-hand Traffic Lane

Same procedure as for previous left turn

Guide No. 10: PRACTICE DRIVING

INSTRUCTIONAL AREAS:

Making Left Turns from a Two-Way Street to a Two-Way Street

Making Left Turns from a Two-Way Street to a One-Way Street

TEACHER ORIENTATION:

Same as for Guide No. 8

STUDENT OBJECTIVES:

Same as for Guide No. 8

Making Left Turns from a Two-Way Street to a Two-Way Street

PREPARATION

Same as for previous left turn except for lane change from right lane to center or left-turn lane.

MAKING THE TURN

Same as for previous left turn

RECOVERY

Same as for previous left turn

Making Left Turns from a Two-Way Street to a One-Way Street

PREPARATION

Same as for previous left turn

MAKING THE TURN

Same as for previous left turn

RECOVERY

Same as for previous left turn except that recovery is made in center lane

Guide No. 11: PRACTICE DRIVING

INSTRUCTIONAL AREA:

Turning the Car Around

TEACHER ORIENTATION:

Discuss traffic regulations, hazards involved. Stress promptness in executing maneuver. Avoid turning around when possible. Use wide, quiet street for beginning practice. Give step-by-step explanation followed by demonstration.

STUDENT OBJECTIVES:

Knowledge of regulations governing maneuver, knowledge of correct techniques, proficiency in executing maneuver.

Making a "U" Turn

PREPARATION

Observation checks for nearby traffic front and rear

Stop signal

Decelerate and stop at curb

Observation before maneuvering both mirrors; look over left shoulder

Signals: left turn, hand and electrical

MAKING THE TURN

Speed control
Observation while turning
Steering and recovery techniques
Acceleration to normal speed after maneuver

Guide No. 12: PRACTICE DRIVING

INSTRUCTIONAL AREA:

Turning the Car Around (continued)

TEACHER ORIENTATION:

Same as for Guide No. 11

STUDENT OBJECTIVES:

Same as for Guide No. 11

Making a "Y" Turn

PREPARATION

Same as "U" turn

MAKING THE TURN

Speed control
Steering techniques (steer only while car is in motion)
Steering anticipation (reverse steering before stopping car)
Braking
Shifting to reverse promptly
Speed control in reverse
Steering recovery after completing turn
Observation techniques throughout maneuver

Guide No. 13: PRACTICE DRIVING

INSTRUCTIONAL AREA:

Driving in Light Traffic Areas—Residential, Suburban, Rural

TEACHER ORIENTATION:

Stress importance of alertness, good judgment, and ability to adapt to changing conditions; also courtesy and consideration toward other users of the highway. Discuss pertinent traffic regulations, rules of the road.

STUDENT OBJECTIVES:

Students should know regulations and proper techniques governing maneuvers and be able to execute them satisfactorily with particular attention to the following:

Speed control according to surrounding conditions
Following distance
Attention to signs, signals, and other control devices
Alertness to critical situations in the making
Alertness to indications of "judgment" situations
Courtesy toward pedestrians and other users of the highways
Driving in the correct lane
Passing
Proper procedure at intersections
Knowledge of right-of-way situations
Alertness and adaptability to changing traffic conditions
Adjustment for changing highway conditions
Adjustment of driving to weather or road conditions

Guide No. 14: PRACTICE DRIVING

INSTRUCTIONAL AREA:

Parking the Car

TEACHER ORIENTATION:

Use parking lot for angle-parking practice. Use stanchions if parking spaces are not marked. Demonstrate all phases of parking. Job sheets are useful in parallel parking operation to help students learn routine. Teach reference points on car.

STUDENT OBJECTIVES:

Student should know regulation governing procedure and should be able to execute maneuver using following techniques:

Angle Parking

PREPARATION

Observation techniques

Signaling: head-in parking; right- or left-turn signal; back-in parking; stop signal

Deceleration

PARKING

Steering techniques

Braking and stopping in parking space

LEAVING PARKING SPACE

Shifting

Signaling

Speed control

Pause for observation when half-way out of parking space

Backing into traffic lane

Steering techniques

Moving forward in traffic lane

Guide No. 15: PRACTICE DRIVING

INSTRUCTIONAL AREA:

Parking the Car (continued)

TEACHER ORIENTATION:

Same as for Guide No. 14

STUDENT OBJECTIVES:

Same as for Guide No. 14

Parallel parking

PREPARATION

Learn reference points on car to be used when parking

APPROACH

- Observation checks and "Stop" signal
- Steering into proper approach lane
- Deceleration
- Stopping position before backing into parking space

PARKING

- Shifting
- Speed control
- Steering techniques (use of reference points)
- Observation
- Braking
- Centering car in parking space

LEAVING PARKING SPACE

- Backing for clearance
- Observation and signaling
- Steering techniques
- Speed control

Guide No. 16: PRACTICE DRIVING

INSTRUCTIONAL AREA:

Driving on Hills

TEACHER ORIENTATION:

Demonstrate and instruct in quiet areas if possible. Teach brake "pumping" for downgrades. Stress keeping in proper lane. Discuss passing limitations.

STUDENT OBJECTIVES:

Students should be proficient in using the following techniques in executing maneuvers:

Ascending steep grades

- Acceleration in advance
- Shifting to lower gear for added power

Road position of car
Use of horn

Starting on hills

Use of left foot on brake, right foot on accelerator for starting (automatic transmission)

Descending steep grades

Speed reduction at top of hill
Shifting to lower gear for better retardation
Braking techniques
Road position
Use of horn

Parking on hills

Upgrade with street curb
Downgrade with street curb
Up or down grade without curb

Guide No. 17: PRACTICE DRIVING

INSTRUCTIONAL AREA:

Defensive Driving—Crash Avoidance

TEACHER ORIENTATION:

Discuss and explain techniques for basic responses to emergency situations (brake, horn, steering, acceleration). Stress alertness to the complete driving scene and anticipation of possible hazardous situations. Review and emphasize skills and attitudes already learned.

STUDENT OBJECTIVES:

Proficiency in the following technique is expected:

Line of vision and focal point ahead of car
Scanning entire scene; moving eyes
Using rearview mirrors frequently
Being alert for pedestrians, bicyclists, children playing, etc.; taking anticipatory precautions

Maintaining good mental and physical condition

Knowing basic responses to emergency situations

Keeping car in good mechanical condition

Keeping windshield and windows clear to avoid glare from sun or headlights

Being sure to have a way out of any situation

Adjusting car speed to surrounding situations and to road, weather, and light conditions

Maintaining adequate following distance in traffic

Being prepared to yield right-of-way

Watching parked cars for people in driver's seat, doors opening, exhaust smoke

Being alert for signals from other cars in your vicinity

Always plainly signaling your intentions well in advance

Using lights correctly at night

Guide No. 18: PRACTICE DRIVING

INSTRUCTIONAL AREA:

Driving in Traffic

TEACHER ORIENTATION:

This instruction should begin in light traffic areas, and as students show increased proficiency, they should progress to more congested industrial areas. Optimum use of areas with varied traffic control devices should be made. Stress use of basic skills and judgments already learned.

STUDENT OBJECTIVES:

Proficiency in use of following techniques is expected:

Familiarity with area traffic regulations

Knowledge of traffic control signs and signals, and their locations

Alertness to potential traffic hazards

Selection of proper traffic lanes

Speed control techniques

Proper use of signals

Maintenance of safe following distance in heavy traffic

Alertness to signals of other drivers
Ability to merge into traffic flow
Alertness to changing phases in the cycles of traffic-control devices
Knowledge of physical conditions affecting traffic-flow patterns
Proper use of one-way streets

Guide No. 19: PRACTICE DRIVING

INSTRUCTIONAL AREA:

Driving on Expressways

TEACHER ORIENTATION:

Begin expressway practice on straight sections of expressway where distances between access roads and exits are relatively short. Before actual practice, discuss and stress how performance of a technique may differ at different road speeds. Also stress observation and alertness.

STUDENT OBJECTIVES:

Student should know regulations governing maneuver, operational techniques, and be able to execute maneuver using following special techniques:

Entering the Expressway

Proper use of acceleration lane
Signaling techniques
Observation
Acceleration techniques
Entering right-hand traffic lane

On the Expressway

Observation: use of rearview mirrors, line of vision for high-speed driving
Speed control techniques
Maintaining safe following distance
Matching speed to surrounding traffic
High-speed steering techniques
Lane-changing procedures
Passing

Anticipating actions of other drivers
Steering compensation for gusty crosswinds
Negotiating curves at high speeds
Driving on road shoulders

Leaving Expressway

Signaling
Braking techniques
Use of deceleration lane
Speed control on exit line

Guide No. 20: PRACTICE DRIVING

INSTRUCTIONAL AREA:

Driving Under Adverse Conditions

TEACHER ORIENTATION:

Since regulations prohibit driving instruction after 5 p.m., night practice cannot be given; however, discussions of night driving techniques should be given to reinforce classroom instruction in this area. Teach use of headlamp tilt switch. Adequate equipment—sand, shovel, chains—should be kept in trunk for driving on snow or ice.

STUDENT OBJECTIVES:

Students should be able to control vehicles under these conditions using following techniques:

Driving in Rain or Fog

Extra care and alertness in observing
Acceleration, steering, and braking techniques on wet roads
Use of windshield wipers and defroster
Ventilating car
Proper use of headlamps
Speed reduction to match road surface and visibility
Alertness to movements of nearby vehicles and pedestrians
Use of reflectant road markings as lane guides

Driving on Snow or Ice

Speed control techniques

Gear selector position
Braking, steering, and accelerating techniques
Signaling
Correcting a skid
Getting out of a snow bank
Getting out of ruts
Starting from a standstill on slippery pavements
Installing tire chains

Guide No. 21: PRACTICE DRIVING

INSTRUCTIONAL AREA:

Basic Operations for Cars Equipped with Standard Transmissions

TEACHER ORIENTATION:

The skills and techniques discussed here and in the following pages deal only with those differing from the ones used when driving cars equipped with automatic transmission. All other skills and techniques not discussed here are used on both types.

STUDENT OBJECTIVES:

Students should know and be able to execute the following techniques:

Driving Straight Ahead

PREPARATION

Starting engine
Shifting to 1st gear
Observation and signaling
Releasing parking brake

LEAVING THE CURB

Clutch: accelerator coordination
Steering techniques
Shifting to 2nd and 3rd gears
Downshifting from 3rd to 2nd
Variation in use of clutch and accelerator when driving in 2nd and 3rd gears

L 108

Stopping the Car

Observation and signaling
Braking techniques in 3rd gear
Braking techniques in 2nd or 1st gears
Use of clutch

Guide No. 22: PRACTICE DRIVING

INSTRUCTIONAL AREA:

Basic Operations for Cars Equipped with Standard Transmissions (continued)

TEACHER ORIENTATION:

Same as for Guide No. 21

STUDENT OBJECTIVES:

Same as for Guide No. 21

Backing the Car

Shifting to reverse
Clutch accelerator coordination
Use of clutch to control speed of car
Steering techniques

Making Turns

Preparation (same as for automatic transmission)
Downshift from 3rd to 2nd before making turn
Clutch: accelerator coordination
Completing turn: acceleration after turn
Upshifting from 2nd to 3rd after completing turn

Turning Around

Gear positions used
Clutch: accelerator coordination to control speed
All other techniques similar to those used with automatic tarns-missions

Parking

Shifting techniques

Clutch: accelerator techniques

Braking techniques

All other processes similar to those used for automatic transmission

Guide No. 23: PRACTICE DRIVING

INSTRUCTIONAL AREA:

Basic Operations for Cars Equipped with Standard Transmission (continued)

TEACHER ORIENTATION:

Same as for Guide No. 21

STUDENT OBJECTIVES:

Same as for Guide No. 21

Maneuvers on Grades

STARTING ON GRADE

Holding car in position with clutch-accelerator technique

Brake-accelerator technique

All other processes similar to those used on cars equipped with automatic transmission

ASCENDING STEEP GRADES

Acceleration techniques

Downshifting: 3rd to 2nd

Clutch: accelerator technique

DESCENDING STEEP GRADES

Downshifting at top of steep grades to 2nd or to 1st

Use of clutch and accelerator at downshift

Downhill braking techniques

All other techniques similar to those used with automatic transmissions

Teaching with Simulators

The instructor who will be teaching Driver Education with the aid of a simulator unit will find himself challenged in unusual ways, some of which may tax his ingenuity. To meet such a challenge, he must:

1. Become thoroughly familiar with the operation of the equipment.
2. Study the films until he is well versed in their content; otherwise, he cannot correct students' errors.
3. Be able to interpret whatever scoring medium is used in diagnostic terms so that he can detect the beginning of bad driving habits.
4. Be able to use the simulator to help students to strengthen disclosed weaknesses and correct potentially dangerous habit patterns.
5. Maintain close liaison between his classes and the practice driving on-the-road to provide optimum transfer of learning.

Every simulator installation, regardless of its make, is equipped with a completely detailed teaching manual covering every phase of the operation of a simulator classroom. Therefore, the discussion of simulator teaching techniques here is in general terms with the addition of a few hints covering specific areas.

Although simulator film libraries are equipped with an introductory film, the instructor, to obtain optimum results, must supply additional orientation verbally and by demonstration timed slowly enough for the comprehension of his students. It is suggested that two periods be used for orientation, the first for the introductory film, the second for oral and demonstration reinforcement.

Experience in using the simulator films will probably convince the instructor that the films in general are too long and too rich in content for efficient use and maximum learning in a forty-minute period. The showings may be divided without interfering with the scoring sequence in the most modern simulation equipment. Part of the film may be shown one day, the remainder the next, with sufficient time left in each period for discussion and correction of any errors. Finally, before leaving the film and progressing to the next one, the complete film might be run and the students scored as a measure of accomplishment. Natu-

rally, the difficulty of the film together with its importance will dictate the number of periods it should be used. As a general indication, 80% to 85% accuracy on scoring by the students indicates mastery of the techniques taught in the film.

The latest models of both makes of simulators now available incorporate an instant reminder system for the students. One manufacturer uses a panel which shows a steering wheel, signal lever, speedometer, and several labeled inserts. If, for example, the student is not using the proper acceleration control, a section marked "Speed" lights up warning the student that his speed is incorrect. When he adjusts it correctly, the illumination shuts off. The other manufacturer uses a slightly different system of error checking. A long narrow panel mounted above the regular instrument panel has nine different sections on its face. In this system, when a student makes an error, the appropriate section is illuminated telling the student what to do to correct the error.

While these instant reminders can be of value to the student, they must be used judiciously, since the flashing light of the instant reminder could easily distract the student from the action carried on in the film. The instant reminder can be switched off if the instructor desires, however, so that he has control of the teaching situation at all times.

The instructor will discover, however, that the students will make technical errors of performance which will not be indicated by the instant reminder, the digital recorder, or the printed record. Typical examples of this kind of error are: using the left foot on the brake pedal; improper handling of the steering wheel; improper grasp of the shifting lever when operating the simulator in manual shift positions. Such errors can only be detected by visual check by the instructor, which makes it necessary for him to circulate about the room as a film is being taught observing the manipulation of the controls by the students and correcting errors as he sees them.

When introducing a new film, the instructor will find it advantageous to give a brief verbal description of the features of the film, the new things to be learned, any special learnings to be stressed, etc., before actually showing the film to the class. This approach seems to produce better results than that of showing the new film to the class without any introduction, the instructor trusting to the producers of the film to provide adequate explanation for any new material shown.

112

Interpreting the film scoring and explaining student errors made during the showing of each film is a vitally important phase of teaching with any simulator installation. It is of little value to the student to learn that he has made a given number of steering errors, another given number of braking errors, etc., if he is not told what kind of steering or braking or other errors he has made and under what circumstances, or in what film situations or sequences he has made them.

The instructor, therefore, must become so familiar with all the films in the simulator library that he can remember and describe the portions of the films in which the students made errors so well that the students will be able to recall the situations in their own minds. He can then, by referring to the printed record, tell the students exactly what kinds of errors they made and suggest the proper remedies to avoid repetition of the same errors.

This kind of interpretation and diagnosis, qualitative and remedial rather than quantitative, results in much more complete comprehension of what is required for correct driving technique. The foregoing general procedure is highly recommended to the teacher who desires to take full advantage of the potential offered by a modern simulator. As has been mentioned before, the instructor's manuals furnished with each simulator installation give detailed discussions of each possible type of scoring of which the simulator is capable.

Motorcycle or Motorbike Driver Education

This section, intended as a supplement to the regular Driver Education program, is suggested for use in those areas where there is sufficient demand for the course and where adequate facilities are available for student practice under safe conditions.

The classroom instruction portion of this section may be added to the regular Driver Education topics to enrich the course and to provide students with general and specific information about riding a motorcycle which ordinarily does not appear in textbooks on Driver Education. This may be done to advantage even if practice facilities are not available, since classroom indoctrination is worthwhile to those who plan to use motorcycles.

Since this course is planned as a supplement to the regular Driver Education course, the teacher qualifications are the same as for the regular Driver Education program. One additional qualification is strongly recommended. The teacher should be an experienced motorcycle rider to provide optimum classroom and practice situations for the students.

Special booklets and other materials are available in quantity at nominal cost to school systems planning to conduct a course in motorcycle safety. These materials include a handbook, a study guide for teachers, safety quizzes, and a layout for a practice area. Also available are special safety films for motorcycle operators, course completion certificates for students, and individual student practice records. Information on where to obtain this material will be found in the Appendix. For those schools intending to include practice instruction, motorcycles or motorbikes can be borrowed from dealers under an agreement with conditions similar to those by which a dual-control automobile is obtained. Licensing, insurance, maintenance, etc., is handled as with the dual-control car. In New York State the instructor must hold a special Motorcycle Operator's License.

A suggested four-period instructional plan for motorcycle riding follows:

FIRST PERIOD

Introduction to Motorcycle Riding

- Increasing number of motorcycles in use
- Need for knowledge of safe driving
- Rules to cope with problems of modern traffic
- Need for developing a high degree of skill to control a motorcycle on the highway.

Motorcycle Safety Film

Discussion Period

SECOND PERIOD

Protective Apparel for Motorcycle Riders

- Goggles
- Helmet
- Gloves
- Windproof and waterproof jacket

Motorcycle Controls and Instruments

Name, function, and location of controls and instruments

How to read instruments and operate controls

Practice using controls on motorcycle in the classroom, on stand, not running

THIRD PERIOD

Theory of Operating a Motorcycle

Safety checks before starting

Starting engine

Driving in low gear

Stopping

Driving in other gears

Maneuvers

FOURTH PERIOD

Defensive Driving

Safety tips

Special hazards

Licenses, Registration, and Insurance

Special operators licenses

Registration

Motorcycle insurance

SUGGESTED LESSONS IN MOTORCYCLE RIDING

For the school planning to offer class instruction in the theory of and practice in motorcycle riding, it is necessary to have a tract of suitable land with a minimum size of 100′ x 200′. This tract should be laid out as a practice area similar to that shown in Fig. 14. All practice areas should be fenced to keep outsiders away and to prevent motorcycles from leaving the practice area.

The instructor of practical motorbike riding should follow a systematic routine of instruction, geared to the individual progress of the students. He should not allow any student to progress to more difficult maneuvers until he shows mastery of all previous instruction. A basic guide for the instructor follows:

Fig. 15: Motorcycle Practice Area

PRACTICE DRIVING: Motorcycle

INSTRUCTIONAL AREAS:

Safety Checks Before Starting; Starting Motorcycle Engine; Riding in Low Gear Around Circular Path

TEACHER ORIENTATION:

Demonstrate all steps in each operation. Repeat, if necessary. Make sure students are letter-perfect in each preliminary step before allowing them to do actual riding. Emphasize slow speed.

STUDENT OBJECTIVES:

Students should know procedures and techniques listed below and should be able to execute them satisfactorily.

Preliminary Safety Checks

Ignition switch off
Gear shift lever in neutral
Motorcycle anchored firmly on stand
Visual check of tires for proper inflation

Starting Engine

Fuel valve in "On" position
Choke closed
Turning ignition switch to "On" position
Opening throttle control about ⅛ turn
Pressing starter button until engine starts
Operating kick or starter until engine starts
Partly opening choke after engine starts and continuing to run engine at medium speed until warmed to operating temperature
Releasing throttle control; allowing engine to run at normal idling speed

Riding in a Circle in Low Gear

Moving motorcycle off stand and balancing
Releasing clutch, shifting to low gear

Clutch-accelerator coordination to move motorcycle smoothly
Controlling speed in low gear
Controlling steering while riding in a circle
Maintaining proper balance
Slowing and stopping, using rear brake first
Shifting to neutral, shutting off ignition, and placing motorcycle on stand

PRACTICE DRIVING: Motorcycle

INSTRUCTIONAL AREAS:

Making Left and Right Turns in Low Gear

Shifting through and riding in all gear positions

TEACHER ORIENTATION:

Review procedures. Demonstrate all operations. Stress the use of reasonable speed in all gear positions. Stress signals, observation, lane position on turns. Emphasize body and machine balance.

STUDENT OBJECTIVES:

Students should know regulations governing operations and be able to execute techniques listed below:

Making Left and Right Turns in Low Gear

Signaling and observing
Decelerating and getting in the proper lane
Steering and balancing around the turn
Straightening out and accelerating when turn is completed

Shifting from Low Gear to Second, Third and Fourth

Accelerating in low gear to proper shifting speed
Releasing clutch and accelerator
Shifting to second gear
Engaging clutch and accelerating to proper speed
Procedure used shifting to third and fourth speeds

PRACTICE DRIVING: Motorcycle

INSTRUCTIONAL AREAS:

Maneuvering on Figure-Eight Path in All Speeds

TEACHER ORIENTATION:

Review turning techniques, balancing, and weight shifting. Emphasize timing for gear-shifting operations. Review speed control.

STUDENT OBJECTIVES:

Proficiency in executing the following techniques is expected:

Maneuvering on Figure-Eight Path

Starting in low gear
Timing for shifting gears
Steering control
Proper use of brake on curves
Shifting weight smoothly for balance on curves
Speed control

Appendix

Glossary

AAA

American Automobile Association

Aetna Drivocator

Teaching machine for use with specially produced films and slides in Driver Education classroom.

Acceleration Lane

Roadway approaching main traffic lanes of an expressway. Purpose of this lane is to give motorist opportunity to attain road speed comparable to that of cars moving in regular traffic lanes.

Accident Hot Spot

Area with high percentage of accidents during given period as compared to surrounding area.

BAVI

Bureau of Audio-Visual Instruction, Board of Education, New York City.

Blind Driveway

A driveway with little range of visibility from side to side at its intersection with the street.

Brake Pumping

Also called brake "fanning." Repeated rapid application, then release of brake pedal. Technique used to avoid loss of braking power on steep downgrades, also to avoid locking brakes on slippery pavement.

Automatic Cycling Traffic Light

Traffic light which automatically changes from red to green, or from red to amber to green and repeats at predetermined intervals.

Channelizing Island

Raised areas at strategic junctions where it is desired to channel traffic along certain roadways.

Concurrent Program

Both classroom and road instruction interspersed during same semester.

DECELERATION LANE

Roadway leaving expressway. This lane allows motorist time to reduce speed to that of roadway on to which he is exiting.

DEPTH PERCEPTION

Part of battery of psychophysical tests. This one measures ability to judge relative position of two or more objects at a distance.

DIGITAL RECORDER

Form of simulator master recorder which records the number and kind of errors made by student on a series of drums instead of printed sheet.

DIVIDED HIGHWAY

Roadway with protective barrier or divider between lanes of traffic moving in opposite directions.

DOWNSHIFTING

Term used in driving a standard-shift car. Refers to moving the shifting lever from 3d-gear position to 2d-gear position.

DRIVING RANGE

Tract of land with driving paths designed for student practice in driving away from street traffic.

DRUNKOMETER

Device for testing alcohol content of blood stream. Used by police departments to test drivers suspected of intoxication.

DUAL-CONTROL BRAKE

Extra brake control connected to regular brake system. Enables driving instructor to control car movement during driving instruction.

DUAL-CONTROL CAR

Automobile with extra brake control on brake and clutch controls. Used for on-the-road driving instruction.

EIGHT-STATE-RECIPROCITY COMPACT

Agreement by New York State and several neighboring states to simplify certification of teachers moving from one of the member states to another.

ENGINE DIPSTICK

Device which measures level of oil in engines.

ERROR-CHECK METHOD

Method of keeping a record of student's progress in practice driving by marking number and type of errors made during each practice session. Progress is indicated by gradual reduction in number and type of errors.

F.H. 5 FORM

Special form obtained from Department of Motor Vehicles. This form is used by "self-insurers" when registering automobiles.

FOLLOWING DISTANCE

Space between your car and one in front of you. This should be sufficient to stop safely without hitting car in front.

F.S. 1 FORM

Form issued by insurance broker to purchaser of automobile in surance policy. This form must be presented to Department of Motor Vehicles before registration can be obtained.

GLARE RECOVERY TEST

One of a battery of psychophysical tests. Measures time required by individual to recover his vision sufficiently to see objects at night after his eyes have been exposed to bright light.

HAND-OVER-HAND

Method of turning steering wheel when turning corners or turning car around.

HYDROPLANING

Tendency of tires to ride on film of water on wet roadways, thus reducing traction.

"IDIOT-LIGHT"

Slang expression for the telltale signal lights used in place of gauges on many modern automobiles.

IGNITION-CUTOFF-SWITCH

Emergency switch in ignition system. Can be operated by instructor in emergency.

INSTANT REMINDER

Device in driving simulator system. Shows students instant they make mistakes.

INSURANCE PREMIUM DISCOUNT

Discount from 5 to 15% of cost of premium. Given to young drivers (ages 17 to 25) who have satisfactorily completed approved high school Driver Education Course.

INTERCHANGE

Section of expressway engineered to allow motorists to leave one route and enter another without crossing high speed traffic.

INTERSTATE EXPRESSWAY

Highway built with Federal funds which crosses state lines and furnishes a direct express route from one important area to another.

ISHIHARA TEST

One of the battery of psychophysical tests. Measures ability to distinguish colors.

JOINT INSPECTION REPORT

Special form made up by school listing various parts of Driver Education car. Used as check sheet for car condition when car is returned to dealer.

LABORATORY INSTRUCTION PROGRAM

Practice driving program in any available form.

"LAST CLEAR CHANCE"

Phrase used in legal cases. A driver who has the last clear chance to avoid an accident and does not use it bears responsibility for accident even if he had right of way.

LIABILITY INSURANCE

Automobile insurance which protects the policy holder from reimbursement of damages caused by the insured automobile to another.

LIMITED ACCESS HIGHWAY

Highway built in such a way that access to it is only at specially designed entrances.

"LOCKING" BRAKES

Applying brakes with such force that wheels stop turning and tires slide on pavement.

McGLADE ROAD TEST

Comprehensive form of road test to measure driving skills of student.

MAGNETIC TRAFFIC BOARD

Steel display board with street and intersection designs. Used with miniature automobile models equipped with permanent magnets to hold models to traffic board.

MALL

Wide separation area, usually of grass, placed between lanes of opposite direction on divided highway.

MASTER RECORDER

Nucleus of driving simulator system. Controls trainer cars and records reactions of students to scenes in special simulator films.

MEDICAL PAYMENT INSURANCE

Automobile insurance covering medical expenses for injuries to passengers in insured automobile.

MOVING VIOLATION

Any violation of New York State Motor Vehicle and Traffic Law committed with vehicle in motion as passing a *Stop* sign or speeding.

MV 50 FORM

Ownership certificate given purchasers of new cars by dealers. To be submitted as proof of ownership when registering automobiles.

MV 50.1 FORM

Waiver of signature on form issued by new-car dealer where purchaser cannot appear personally to sign MV 50 ownership certificate.

MV 283 CERTIFICATE

Certificate issued by Motor Vehicle Department to secondary school teachers completing the STATE-approved teacher-training courses for certification to teach Driver Education.

MV 285 CERTIFICATE

Certificate issued by Motor Vehicle Department to high school students successfully completing approved high school Driver Education course.

NIGHT VISION TEST

One of the battery of psychophysical tests. Measures ability to see in a dim light.

OBSERVATION TIME

Time spent by Driver Education student in car when not actually driving.

OVERHEAD PROJECTOR

Device to project images over head of operator on screen.

OVERLAY

Supplementary section of transparent plastic to be used over basic transparency to show additional processes or operations.

OVERPASS

A roadway or walkway crossing above another highway.

PERIPHERAL VISION TEST
One of a battery of psychophysical tests. Measures included angle of perception.

POINT SYSTEM
System of Department of Motor Vehicles for assigning demerits to certain moving violations. An accumulation of these demerits makes license revocation mandatory.

PRISMATIC INTERIOR REARVIEW MIRROR
Mirror so designed that both driver and instructor can have a clear view of road behind car.

PROPERTY DAMAGE INSURANCE
Insurance coverage which protects policy holder from reimbursement of damages caused by insured automobile to personal or real property.

PSYCHOPHYSICAL TESTING DEVICES
Mechanical and electrical devices to test certain physical, mental, and emotional qualities of Driver Education students.

REACTION TIME TEST
One of a battery of psychophysical tests. Measures time an individual reacts to a signal.

"REAL-WORLD" DRIVING EXPERIENCES
Experiences in actual driving situations.

REFERENCE POINTS
Certain locations on automobile as reference points in a maneuver such as parallel parking.

REFLECTANT MARKERS
Road-edge marking devices made of material which reflects beams from approaching automobile headlights.

"REQUEST FOR COURSE COMPLETION CERTIFICATES" FORMS
State Education Department forms which are listed names of all students successfully completing a Driver Education course.

REVERSE FLOW
Technique of changing direction of traffic movement from one way to the opposite at specified hours to cope with excessively heavy flow at peak periods.

ROAD-HAZARD FLASHER SIGNAL
Flashing amber light at danger spot such as very sharp curve or "T" intersection.

ROAD RECORD CARD
Progress chart to record students' progress in driving skills.

SCHOOL ZONE
Critical areas surrounding a school where speed should be reduced because of pedestrian hazards.

SELF-INSURED
Term applied to large corporations, governmental agencies, others, who elect to assume financial responsibility for any damages caused by their automobiles.

SIEBRECHT ATTITUDE SCALE
A questionnaire developed to measure various drivers' attitudes.

SIMULATOR
Training device (with standard automobile controls and instruments) which gives student practice in driving in a classroom by means of films which reproduce actual traffic situations.

SKID
Loss of tire traction which causes automobile to slide either straight ahead or to one side.

"SMITH SYSTEM"
Defensive driving techniques promulgated by a veteran Driver Education instructor.

STEADINESS TEST
One of a battery of psychophysical tests. Measures muscular control.

STEERING RECOVERY
Returning steering wheel to straight-ahead position.

STOPPING DISTANCE
Distance necessary to stop an automobile from a given speed.

"TAILGATING"
Following car ahead too closely for speed your car is travelling.

30° DANGER POINT
Temperature at which road ice begins to melt, thus forming extremely slippery film of water on ice.

TRACTION
Frictional ability of tires to grip road surface without slipping.

TRAFFIC CONTROL FLASHER SIGNAL
Flashing red or amber light at hazardous intersection in lighter traffic areas than those controlled by a cycling traffic light.

TRAFFIC FLOW ROUTE
Street or streets on which traffic is allowed to move in a specified direction only to expedite free movement of vehicles through congested areas.

TRAFFIC ROTARY
Interchange device in form of circle which connects several important routes. Traffic enters this rotary and proceeds counterclockwise until desired route is reached, at which point exit is made.

TRAINER CAR
Simulated automobile, part of driving simulator system, which student manipulates in response to scenes in special films.

TRANSPARENCY
Transparency sections of heavy plastic with designs or diagrams for use with overhead projectors.

TV TRAFFIC SYSTEM
Closed-circuit TV system with viewing screens in Department of Traffic control centers.

UNDERPASS
Roadway or walkway crossing beneath highway.

UNIFORM VEHICLE CODE
Uniform set of rules governing highway signs, signals, markings, certain rules of the road, etc. Recommended for adoption by all states to encourage uniformity in traffic regulation.

"U" TURN
Turning-around maneuver involving continous forward motion of the automobile which follows a path corresponding to the letter U.

VISUAL ACUITY TEST
Also called Snellen Test. Measures sharpness of vision.

WIRING HARNESS
System of wires and cables to connect simulator trainer cars to master recorder.

"WHOLE DRIVING TASK"
The entire process involved in making a trip.

"Y" TURN
Turning-around maneuver involving forward and backward movement of automobile, path of which follows roughly shape of letter Y.

Form 1A - Course Approval

Department Use Only
Re-Approved:
Not Approved:
Date:

THE UNIVERSITY OF THE STATE OF NEW YORK
The State Education Department
Division of General Education
Albany 12224

APPLICATION FOR APPROVAL OF DRIVER AND TRAFFIC SAFETY EDUCATION PROGRAM
(Two copies of this form must be filed - please print)

For original approval of the Driver and Traffic Safety Education Program, it is necessary to submit the following form:

Form 1A - Application for Approval of Driver and Traffic Safety Education Program - 2 copies

All these forms must be submitted at the same time by the responsible school authority whose signature is affixed to this application.

1. Name of School _____
2. Address _____
3. Attach Names, Address and MV 283 Number of each teacher.
4. What is the total number of pupils expected to take this program per year? _____
5. How many classes of 36 pupils or less will be offered per week? _____
6. Will the course be based on Policies Governing the Conduct of High School Driver and Traffic Safety Education of the Department? _____
7. Will the program be classroom instruction only? _____ (If yes, answer 7a and 7b)
   a. Total number of periods of classroom instruction each pupil will receive _____
   b. Length of period _____
8. Will the program be classroom and laboratory instruction? _____
   (If yes, answer 8a, 8b, 8c)
   a. Total number of periods of classroom instruction each pupil will receive _____
   b. Total number of periods of laboratory instruction each pupil will receive _____
   c. Length of period in minutes _____
9. Do you certify that for one-half unit of credit:
   a. Each pupil will receive not less than 36 periods of classroom instruction? _____
   b. Not more than four pupils will receive laboratory instruction in the vehicle during any single period? _____
   c. Each pupil will receive not less than 36 periods of laboratory instruction? _____
   d. Each pupil will receive a minimum of 4 periods a week of instruction for one semester? _____
   e. Each pupil will receive a total of at least 72 periods of instruction during the program? _____
10. Does your school assign any student to more than 90 minutes of instruction in Driver and Traffic Safety Education in a given day? _____ If yes, explain in detail in an attached letter.

11. Will classes be scheduled at any time other than during the normal class day?_____
If yes, explain in detail in an attached letter.

12. Is the program scheduled on other than a semester basis?_____
If yes, explain in detail in an attached letter.

13. Do you permit pupils from other schools to enroll in your Driver Education course? _____ If yes, please answer the following:

a. Do you require written approval for enrolling such students from the principal of their home school? _____

b. Do you require written approval of the parents or guardians of the pupil?_____

c. Do you report final grades to the home school of the pupil?_____

14. Are you contracting with an individual*, group, or commercial enterprise for the purpose of providing classroom and/or laboratory instruction in Driver Education?

_____

a. Name and Address of individual or agency so contracted:_____

_____

b. Is there a written contract involved?_____

c. Who is responsible for the supervision of the teachers?_____

15. Is the Driver Education automobile in the name of the school?_____

If no, in whose name is it?_____

16. Does the School carry in its name the necessary insurance coverage both for the vehicle and the passengers?_____

If no, in whose name is it?_____

17. Is the vehicle identified with the name of the school?_____

18. Please submit a copy of the final examination for the past year.

I hereby certify that the course will be based on Policies Governing the Conduct of High School Driver and Traffic Safety Education, that the minimum requirements of the Department will be met as found in the above publication and that no blue cards will be claimed from the Department of Motor Vehicles unless the time requirements are met in full.

_____ _____
DATE SIGNATURE - SUPERINTENDENT OR PRINCIPAL

*This does not mean the hiring of a teacher (full or part time) who becomes a member of the staff of the school.

THE UNIVERSITY OF THE STATE OF NEW YORK
THE STATE EDUCATION DEPARTMENT
ALBANY, NEW YORK 12234

FORM 2 - TEACHER APPROVAL

SAFETY EDUCATION UNIT

DEPARTMENT USE ONLY
All Approved: _____
Private Schools Only: _____
Permanent Approval: _____
3-Year Provisional: _____
Approved By: _____
Date: _____

APPLICATION FOR APPROVAL AS TEACHER OF DRIVER AND TRAFFIC SAFETY EDUCATION
(Two copies of this form must be filed for each teacher)

1. Name of School System: _____

2. Name of School: _____ High School Principal: _____

3. Address of School: _____ Telephone No. _____

4. Name of Applicant: _____ Home Telephone No. _____
(Last) (First) (Middle)

5. Address of Applicant (as it appears on driver's license) _____
(Street)

_____
(City) (State) (Zip Code)

6. Date of Birth ___ / ___ / ___ Height _____ Weight _____ Color Eyes _____
(Mo.) (Day) (Year)

7. How long have you held a driver's license? (Years) _____ How long have you held a New York State driver's license? (Years) _____ (If less than two full years, please attach a driving abstract secured from the licensing agency in the state last licensed.)

New York State driver's license Identification Number: _____

8. Basic Course Work in Driver and Traffic Safety Education completed at:

_____ _____
(COLLEGE or UNIVERSITY) (ADDRESS)

Course Titles: _____

Course Dates: From: ___ / ___ To: ___ / ___ Credits: _____
(Mo.) (Year) (Mo.) (Year)

(If course was taken out-of-state, have an offical transcript sent to the Division of General Education, Safety Education Unit, Room 301 EB).

9. Advanced Driver Education Course completed at: _____
(COLLEGE or UNIVERSITY)

_____ _____
(ADDRESS) (COURSE TITLE)

Course Dates: From: ___ / ___ To: ___ / ___ Credits: _____
(Mo.) (Year) (Mo.) (Year)

10. List any accident in which you have been involved:_____

_____

Date:_____ Place:_____ Amount of Property Damage:_____

Were any bodily injuries sustained?_____ _____

11. List any license suspensions or revocations that you have had:_____

_____

Date:_____ Place:_____ By Whom:_____

Reasons:_____

12. List any offenses for which you have been found guilty in any court (including motor vehicle violations other than parking):_____

Date:_____ Place:_____

13. Do you have any physical disability or limitations?_____(Describe in an attached letter).

14. Do you hold a valid secondary school teacher's certificate, issued by the New York State Education Department?_____* Number:_____

Type of Certificate (check) Provisional ☐ Permanent ☐ Other ☐
If "other" explain in an attached letter.

Valid for what subject fields?_____

*If NO: Are you working for a certificate valid for secondary school service-(T.C. 30)?_____

What grade level and subject are you teaching?_____

Are you eleigible for a secondary school teacher's certificate?_____

15. Are you a regular member of this school's faculty?_____ _____

16. Have you taught driver education in an approved program at any time since taking the basic course? _____ Place:_____ From:___/___ To:___/___
(No.) (Year) (No.) (Year)

17. Have you ever held an MV 283 approved card issued by the New York State Department of Motor Vehicles?_____ Number:_____ Date Issued:_____

DATE:_____ SIGNATURE OF APPLICANT:_____

NAME OF SUPERINTENDENT OR PRINCIPAL (typed)_____

DATE:_____ SIGNATURE:_____

NOTE: Within three years after receiving PROVISIONAL APPROVAL, the applicant is required to complete an additional minimum two (2) credit hour, registered inservice preparation course entitled: TRENDS AND PROBLEMS IN DRIVER AND TRAFFIC SAFETY EDUCATION.

MV-501.1 (11/88)

State of New York - Department of Motor Vehicles

REPORT OF ROAD TEST FOR CHAUFFEUR'S LICENSE — CLASS 1

Applicant's Signature		Date of Birth
Pending or Misc. No.	Permit or Motorist Ident. No.	
Reg. No. Tractor	Reg. No. Trailer	Year & Make
Post Name or No.		Date of Test
Inspector		Shield Number

APPLICANT: IF YOU HAVE FAILED DO NOT DESTROY THIS NOTICE! Present it with new application and fee. Preliminary tests will be waived if new application is submitted within 30 days from the date of this road test.

REASONS FOR FAILURE IN ROAD TEST

GROUNDS FOR IMMEDIATE FAILURE

☐ Accident ☐ Dangerous Action ☐ Serious Viol. ☐ 3 Ten Point Items

Reason _____

MISCELLANEOUS GRADED REASONS (More than 40 points circled below)

A. PRE-TEST (15 Min. Maximum)

1. Fails to set emergency valve or close manual valve before disconnecting air hoses 10
2. Fails to block trailer wheels where necessary 10
3. Opens fifth wheel release lever before lowering dolly wheels 10
4. Fails to connect air hoses before final coupling of trailer 10
5. Fails to activate trailer brakes before coupling 10
6. Fails to check connections after coupling 10
7. Fails to check ☐ Wheels ☐ Tires ☐ Lights ☐ Horn ☐ Wipers 5
8. Fails to check all gauges 5

B. LEAVING CURB

9. Fails to signal 5
10. Fails to observe or use caution 10
11. Fails to check foot brakes within 50 feet 10

C. TURNING-INTERSECTIONS

12. Fails to signal turns 5
13. Improper signal 5
14. Fails to observe 5
15. Approaches from improper lane 5
16. Swings too short 5
17. Swings unnecessarily wide 5
18. Poor judgment approaching or at intersections ☐ Speed ☐ Turning ☐ Stopping ☐ Observing 5
19. Fails to re-enter proper lane 5
20. Speed on turns 10
21. Shifts during turn 10

D. PARKING-BACKING

22. Fails to leave cab to check rear before backing 10
23. Fails to observe-backing 5
24. Oversteers or zig-zags when backing straight 5
25. Unable to back straight (two pull-ups allowed) 10
26. Stops too far from curb 5
27. Unable to park properly 10

E. GENERAL

28. Poor judgment in traffic 5
29. Follows too closely 10
30. Slow-impedes traffic 5
31. Poor steering control ☐ Turning ☐ Straight driving ☐ Maneuvers 10
32. Delayed braking 10
33. Poor acceleration 5
34. Uses trailer brake only 5
35. Fails to keep to right 5
36. Fails to anticipate potential hazards 5
37. Shifts on railroad tracks 10
38. Poor shifting ☐ Down ☐ Up ☐ Improper Gear 10
39. Fails to yield right of way ☐ Pedestrian ☐ Other 10
40. Speed excessive for conditions ☐ Traffic ☐ Weather ☐ Road 10
41. Inattentive to traffic ☐ Signs ☐ Signals 10
42. Fails to signal when changing lanes 10
43. Lack of experience 5
44. Poor clutch or engine control 5

☐ PASSED	☐ FAILED	TOTAL

INSTRUCTIONS TO ISSUING OFFICE: Restrict License as indicated

☐ Corrective Lenses ☐ Full View Mirror ☐ Automatic Transmission

☐ Other

☐ REDATE _____

☐ HOLD _____

MV-501.2 (11-69)

State of New York - Department of Motor Vehicles

REPORT OF ROAD TEST FOR CHAUFFEUR'S LICENSE — CLASS 2 or 3

Applicant's Signature	Date of Birth
Pending or Misc. No.	Permit or Motorist Ident. No.
Year & Make	Plate No.
Post Name or No.	Date of Test
Inspector	Shield Number

☐ APPLICANT: IF YOU HAVE FAILED DO NOT DESTROY THIS NOTICE! Present it with new application and fee. Preliminary tests will be waived if new application is submitted within 30 days from the date of this road test.

REASONS FOR FAILURE IN ROAD TEST

GROUNDS FOR IMMEDIATE FAILURE

☐ Accident ☐ Dangerous Action ☐ Serious Viol. ☐ 2 Ten Point Items

Reason _____

MISCELLANEOUS GRADED REASONS (More than 25 points circled below)

A. PRE-TEST (10 Min. Maximum)
1. Fails to check ☐ Wheels ☐ Tires ☐ Lights ☐ Horn ☐ Wipers 5
2. Fails to check all gauges 5

B. LEAVING CURB
3. Fails to signal 5
4. Fails to observe 5
5. Fails to use caution 5
6. Fails to check foot brakes 10

C. TURNING-INTERSECTION
7. Fails to signal turns 5
8. Improper signal 5
9. Fails to observe 5
10. Swings too short 5
11. Swings unnecessarily wide 5
12. Poor judgment approaching or at intersections ☐ Speed ☐ Turning ☐ Stopping ☐ Observing 5
13. Fails to re-enter proper lane 5
14. Speed on turns 5
15. Approaches from improper lane 5

D. PARKING-BACKING
16. Fails to leave cab to check rear before backing (no observer) 10
17. Fails to observe (backing) 10
18. Unable to park 5
19. Stops too far from curb 5
20. Excessive maneuvers in parking 5

E. GENERAL
21. Poor clutch or engine control 5
22. Poor judgment in traffic 5
23. Follows too closely 10
24. Slow-impedes traffic 5
25. Poor steering control ☐ Turning ☐ Straight Driving ☐ Maneuvers 10
26. Poor or delayed braking 5
27. Poor acceleration 5
28. Speed excessive for conditions ☐ Traffic ☐ Weather ☐ Road 10
29. Fails to anticipate potential hazards 5
30. Fails to yield right of way ☐ Pedestrian ☐ Other 10
31. Fails to use proper lane 5
32. Poor shifting ☐ Down ☐ Up ☐ Improper gear 10
33. Inattentive to traffic signs 5
34. Inattentive to traffic signals 5
35. Fails to signal lane changes 5
36. Fails to use caution changing lanes 5
37. Shifts on railroad tracks 10

☐ PASSED ☐ FAILED	TOTAL

INSTRUCTIONS TO ISSUING OFFICE: Restrict License as indicated.

☐ Corrective Lenses ☐ Full View Mirror ☐ Automatic Transmission
☐ Class 2 ☐ Class 3 ☐ Other
☐ REDATE _____
☐ HOLD _____

MV-5[illegible] (11-68)

State of New York - Department of Motor Vehicles

REPORT OF ROAD TEST FOR MOTORCYCLE LICENSE

Applicant's Signature		Date of Birth
Pending or Misc. No.	Permit or Motorist Ident. No.	
Year & Make	Plate No.	Comm'l School Vehicle ☐
Post Name or No.		Date of Test
Inspector		Shield Number

APPLICANT: IF YOU HAVE FAILED DO NOT DESTROY THIS NOTICE! Present it with new application and fee. Preliminary tests will be waived if new application is submitted within 30 days from the date of this road test.

REASONS FOR FAILURE IN ROAD TEST

GROUNDS FOR IMMEDIATE FAILURE

☐ Accident ☐ Dangerous Action ☐ Serious Viol. ☐ Refused to follow Instructions ☐ Inadequate Control of Motorcycle

☐ 2 Ten Point Items Reason _____

MISCELLANEOUS GRADED REASONS (More than 20 points circled below)

A. MANEUVERS
1. Fails to observe or use caution 5
2. Poor circle 5
3. Poor figure eight 5

B. LEAVING CURB
4. Fails to ☐ Observe ☐ Signal ☐ On time ☐ Adequately 5
5. Fails to use caution towards ☐ Pedestrian ☐ Other 5

C. TRAFFIC DRIVING
6. Fails to keep right 5
7. Improper lane of traffic 5
8. Fails to maintain proper lane position 10
9. Speed excessive for conditions ☐ Traffic ☐ Weather ☐ Road 10
10. Fails to yield right of way to ☐ Pedestrian ☐ Other 10
11. Poor judgment in traffic 5
12. Weaving through traffic 10
13. Following too closely 10

D. INTERSECTION & CORNERS
14. Fails to signal for turns 5
15. Fails to signal properly 5
16. Fails to get in proper lane for turn 5
17. Excessive speed on turns 5
18. Fails to stop near center of intersection when waiting to make left turn 5
19. Swings wide-short right 3
20. Swings wide-short left 3
21. Poor judgment approaching or at intersections 5

E. GENERAL
22. Repeated stalling 5
23. Poor engine control 5
24. Poor steering control 5
25. Delayed braking 5
26. Dangerous braking 10
27. Unfamiliar with controls 10
28. Poor clutch control 3
29. Poor shifting 3
30. Rolling on grade 5
31. Too slow 5
32. Poor reaction to emergencies 5
33. Inattentive to traffic ☐ Signals ☐ Signs 5
34. Poor balance 10

☐ PASSED ☐ FAILED	TOTAL

INSTRUCTIONS TO ISSUING OFFICE: Restrict License as indicated.

☐ Corrective Lenses ☐ Full View Mirror ☐ Other

☐ REDATE _____

☐ HOLD _____

130

135

THE UNIVERSITY OF THE STATE OF NEW YORK
THE STATE EDUCATION DEPARTMENT
SAFETY EDUCATION UNIT

REQUEST FOR COURSE COMPLETION CERTIFICATES IN TRAFFIC SAFETY EDUCATION

Name of School ..... Address of School ..... Telephone No. .....

I hereby certify that the following pupils have satisfactorily completed a State approved program in Traffic Safety Education and I, therefore, request that certificates of course completion be issued.

The course extended from ....., 19.... to ....., 19.....

Certificate Number	NAME OF PUPIL Last	First	Middle	HOME ADDRESS OF PUPIL	DATE OF BIRTH Mo. Day Yr.	Class Hours: Traffic Safety Education	Motorcycle Safety Education	Laboratory Hours: Behind the Wheel	Observation	Simulation	Multiple Vehicle	Motorcycle	Total Hours	Final Mark	Teacher: Give Full Name and Motor Vehicle 285 Card Number: NAME Last	First	Middle	MV 285 Number

Date certificates were issued ..... (Signed) .....
(Principal or Superintendent)

NOTE: MAIL COMPLETED FORM TO DRIVER EDUCATION UNIT, DEPARTMENT OF MOTOR VEHICLES, SOUTH MALL, ALBANY.
MV 1223R

NEW YORK STATE GUIDELINES
DRIVER EDUCATION FOR ADULTS

PURPOSE

Driver education for adults should have as its primary purpose the learning of skills necessary for safety in traffic and the development of attitudes, appreciations, and understandings which are necessary to the safe, sane, courteous, and cooperative use of our streets and highways.

We realize, of course, that many adults are interested only in acquiring skill enough to pass a driver's test and to get a driver's license. But that cannot be the school's objective. We have enough licensed drivers; and it is the licensed drivers who cause most of our highway accidents. What we need are licensed drivers who have had the special training in safety that a driver education class can give.

PATTERN

A normal course in driver education for adults consists of two parts: classroom instruction and road training. The State Education Department will not approve courses consisting of road training alone. The two parts are run mostly concurrently. A typical pattern is a class meeting twice a week for two hours each session, one session for classroom instruction and the other for roadwork. Classroom instruction continues for five or six weeks. Road training continues for ten weeks.

Registrations for a driver education class may be held to a multiple of four, such as 20 or 24, since this class must be subdivided into groups of four for road training. No less than four should be assigned to a car for each road session. A typical two-hour session gives each student ½ hour behind the wheel and 1½ hours of observation.

For statistical convenience it is well to schedule both classroom instruction and road training in one-hour units or multiples of that unit.

STUDENTS

Only out-of-school youths and adults may be admitted to a driver education course for adults. An out-of-school youth is a person above the compulsory school age who is not in regular attendance at a public or private secondary school.

All students must possess a learner's permit from the Department of Motor Vehicles before he may start his road training. They must also make their own applications for Motor Vehicle tests and licenses. The schools provide instruction, nothing more.

In a few cases certain adults will find the number of training hours inadequate and will wish to repeat the course. This is a matter for local decision.

9/1/66 *Reprinted from a Bulletin Published by the New York State Education Department*

INSTRUCTORS

Ordinarily, instructors in the secondary driver education program are used in the adult program. They therefore hold the certificate MV283 necessary for such work.

If a teacher who does not already hold this form is to be used in the adult program, he must obtain a statement of equivalency from the State Education Department. Application for this must be addressed to the Division of Health, Physical Education and Recreation. The equivalency statement assures the director that the teacher meets the requirements for the issuance of certificate MV283 with respect to special training and driving record.

No instructor should be used unless he already has the certificate MV283 or the statement of equivalency.

COURSE CONTENT

With certain modification, materials which have been developed for secondary school students may be used with adults. The syllabus prepared by the Bureau of Secondary Curriculum Development, State Education Department, is recommended. Modifications might be, for instance, changing the mental attitude unit to include adult examples in adult terms; eliminating or minimizing the unit on driving as a vocation; expanding the unit on cost of automobile transportation.

EQUIPMENT

A dual-controlled car is essential for the road training phase of driver education. Practical devices for testing mental, physical, and emotional

139

characteristics are a highly desirable adjunct to classroom instruction. Audio-visual aids should be borrowed or purchased.

Adequate insurance protection for the school district and for the teachers must be provided. A check with the carrier should be made.

STATE AID

Expenditures for driver education for adults may be included among the approved educational expenditures of the school district for purposes of State aid.

No program of driver education will be approved unless there is a *minimum* of ten hours of classroom instruction. No maximum has been set, since this phase of the work should be emphasized and expanded. In fact, every student should be required to attend classroom instruction.

A *maximum* of twenty hours will be approved for road training for each group of four adults. This maximum is based on the fact that adult students can get additional road practice with experienced drivers.

STATE REPORTING

At the close of the school year, driver education is reported on the district's annual adult education report. Careful attendance records for both classroom and road training groups provide a basis for accurate reporting. Samples of reporting are given on the attached reporting form.

DRIVER EDUCATION REFRESHER COURSE

Because of recent development, the need of refresher courses in driver education has become apparent—for the aged, for the accident prone, for drivers of commercial vehicles, and for others. Any of these would be approvable courses.

The objectives of such courses are to correct inadequate or dangerous attitudes and skills, to review motor vehicles regulations and laws, to understand and learn to compensate for any loss in physical ability, to appreciate changes in driving habits for modern high-speed highways, etc.

Careful planning is essential, since members of the class, drivers all, may be somewhat embarrassed, apprehensive, or even resentful, as in

the case of people assigned to class by court order. Maximum use of psychophysical equipment and audio-visual aids is recommended.

Behind-the-wheel instruction will depend on the needs of class members and the objectives of the instructor.

EXCERPTS FROM THE NEW YORK STATE PRE-LICENSING CLASSROOM DRIVER TRAINING AND HIGHWAY SAFETY INSTRUCTION LAW

Section 7.1 INTRODUCTION. Section 501 of the Vehicle and Traffic Law permits the Commissioner of Motor Vehicles to require proof of satisfactory completion of three hours of classroom driver training and highway safety instruction, or the equivalent thereof, prior to the issuance of a license.

7.2 DEFINITIONS. For the purposes of this regulation, the following terms shall have the following meanings:

(a) NEW DRIVER. Every person who makes application for an original driving license, except a person for whom the requirement of a road test prior to issuance of such license is waived in accordance with Part 8 of the Regulations of the Commissioner, and except a person who is applying for an original license within one year from the date of revocation of a prior New York license.

(b) APPROVED SCHOOL. The Department of Motor Vehicles or any person, agency, accredited secondary school or college, or municipality which is approved by the Commissioner for the purpose of teaching a three hour course of classroom driver training and highway safety required by the Commissioner for the issuance of a license to a new driver.

(c) APPROVED COURSE. A classroom training course in driver training and highway safety which meets standards established by the Commissioner given by an approved school.

(d) QUALIFIED TEACHER. A person holding a high school driver education instructor's certificate (form MV283), an instructor's certificate issued by the Commissioner for a drivers' school, a person approved by the Commissioner for providing instruction in a chauffeur training program approved by the Commissioner, or a motor vehicle license examiner approved by the Commissioner.

(e) CURRENT COURSE COMPLETION CERTIFICATE. A certificate provided by the Depatment of Motor Vehicles and issued by an approved school which indicates that the person named thereon completed an approved course within the past year. A student certificate (MV285) issued upon the successful completion of a high school driver education course, completed within the past year shall be acceptable in lieu of a course completion certificate.

7.3 ISSUANCE OF LICENSES. On and after April 1, 1969, no license shall be issued to a new driver unless such new driver submits proof of completion of an approved course.

7.4 PROCEDURE FOR LICENSING OF NEW DRIVERS.

(a) Except for a student enrolled in an approved high school course, a new driver shall not enroll in an approved course unless he is the holder of a valid learner's permit.

(b) Upon completion of an approved course, the course completion certificate shall be issued to the new driver by the approved school which provided the student with such course.

(c) No road test appointment shall be made for a new driver unless he submits a current course completion certificate to the Department of Motor Vehicles. This provision may be waived by a motor vehicle district director, a county clerk, or person designated by such district director or county clerk, except that in no case shall a road test be given until a current course completion certificate is submitted.

7.5 APPROVED SCHOOL. The following may qualify as approved schools.

(a) A high school having a driver education course approved by the Education Department.

(b) A licensed drivers' school which has been in continuous operation for a period of at least 60 days.

(c) An organization having a chauffeur training program approved by the Commissioner.

(d) A high school having an adult education course approved by the Department of Education for the purpose of offering an approved course.

(e) An accredited high school or college or a municipality intending to offer an approved course taught by a qualified teacher.

7.6 APPROVAL OF SCHOOL. Any school set forth in Section 7.5 may be designated as an approved school by the Commissioner upon submission of request for such approval on a form prescribed by the Commissioner. Such approval shall be evidenced by the issuance of course completion certificates to the school by the Department of Motor Vehicles.

7.7 REVOCATION OF APPROVAL. The Commissioner may revoke the approval of any school if he determines that the school no longer qualifies as an approved school or if the school fails to comply with the provisions of these regulations.

7.8 CLASSROOM AND CLASS SIZE.

(a) An approved school must provide a classroom which is clean, adequately lighted, heated and ventilated and free from any visible and/or audible distractions. Such classroom must have adequate capacity and seating facilities for the number of students enrolled in any such course. The classroom must be equipped with adequate blackboards which are visible from all seating areas and with all other equipment necessary for adequate presentation of the required materials.

(b) In no case shall any class contain more than 36 students.

(c) An approved classroom may be shared by more than one approved school. Instruction may be given to students of more than one approved school at the same time. Any violations or irregularities with respect to facilities or instruction occurring at a time when the facilities or instruction are being used by more than one approved school shall be considered a violation or irregularity on the part of every approved school having students participating in such course, and shall subject each such school to revocation of school approval issued by the Department of Motor Vehicles with respect to any type of driver training or instruction.

7.9 COURSE CONTENT AND PRESENTATION. An approved course must consist of at least three hours of instruction, excluding time spent on administrative or clerical activities. The course shall be given in accordance with a syllabus provided by the Department of Motor Vehicles and must be taught by a qualified teacher in a manner acceptable to the Commissioner.

7.10 COURSE COMPLETION CERTIFICATE. A supply of course completion certificates shall be furnished by the Department of Motor

Vehicles for each approved school. Except as hereinafter provided, upon completion of an approved course, the original of a course completion certificate completed by the approved school shall be issued to the student. The duplicate copy of such certificate shall be retained by the approved school for a period of one year from the date of issuance. If the approved school is a high school providing an approved driver education course, a course completion certificate may be issued to the student when the instructor, in his discretion, is satisfied that the material required to be given in an approved course has been received by the student even though the driver education course has not been completed.

7.11 FEES. No student may be charged a fee in excess of five dollars for an approved course.

7.12 REQUIRED RECORDS. Each approved school shall maintain a record, on a form or forms prescribed by the Commissioner, of all students who have completed the approved course. Such records shall contain such additional information as may be required by the Commissioner and shall be available for inspection by the Department of Motor Vehicles.

7.13 EFFECT OF DRIVER TRAINING COURSE GIVEN PRIOR TO APPROVAL. No classroom driver training course given by any approved school prior to the date of approval shall be an approved course, except that an approved high school driver education course in progress at the time of such approval shall be deemed to be an approved course.

7.14 OTHER LAWS AND REGULATIONS. In addition to the provisions of these regulations, any course given in a school under the jurisdiction of the Department of Education shall be subject to the rules and regulations of the Department of Education and the Education Law.

SIEBRECHT ATTITUDE SCALE

BY ELMER B. SIEBRECHT, Ed.D.

NEW YORK UNIVERSITY
REPRINT
SCHOOL OF CONTINUING EDUCATION AND EXTENSION SERVICES
THE CENTER FOR SAFETY

PRELIMINARY EDUCATION

1. Name ..... City ..... State .....
   Date .....
2. Age ..... Sex ..... Extent of education: Freshman .....
   Sophomore ..... Junior ..... Senior ..... Other .....
3. Place of residence: City ..... Small town .....
   Country (farm) ..... Other .....
4. Driving experience: (a) Number of years you have driven a motor vehicle .....
   (b) Approximate number of miles driven (1) last year .....
   (2) last five years ..... (c) Number of accidents you have had
   (1) while driving ..... (2) as a pedestrian .....
5. Kind of vehicle you drive most often: (a) Automobile ..... (b) Truck .....
   (c) Bus ..... (d) Other .....
6. Method by which you learned to drive: (a) From member of the family .....
   (b) From a friend ..... (c) By yourself ..... (d) Course in high school .....
   (e) Other .....
7. Your occupation ..... Also your father's occupation if you are a student .....

DIRECTIONS: Below is a series of statements about problems related to the driving of motor vehicles. There are no correct answers for these statements. They have therefore been set up in such a manner as to permit persons to indicate the extent to which they agree or disagree with the ideas expressed. Suppose the statement is

Only persons who have reached their nineteenth birthday should be permitted to drive a motor vehicle.

Strongly agree ..... x ..... Agree ..... Undecided ..... Disagree ..... Strongly disagree

As you read the statement you will know whether you agree or disagree with the idea expressed. You must then indicate the extent to which you agree or disagree. If you agree fully, place an *x* before the words "Strongly agree"; if you agree but with reservation, that is you do not fully agree, place the *x* before the word "Agree," as in the sample above. If you disagree with the idea, indicate the extent to which you disagree by checking either "Disagree" or "Strongly disagree." But if you neither agree nor disagree, that is you are not certain, place the *x* before "Undecided." To indicate your attitude, read the statement carefully, then quickly check the position which best indicates your attitude. Do not spend much time with any statement. ***But be sure to answer every statement.*** You should complete the work in no more than ***ten minutes.*** Most persons will finish in less time. Work fast but carefully.

COPYRIGHT 1941 BY ELMER B. SIEBRECHT
All rights reserved. No part of this scale may be reproduced in any form without permission in writing from the author.

(By permission of The Center for Safety, New York University)

STATEMENTS

1. Drivers' examination should be more difficult to eliminate all but the best drivers.
   Strongly agree[1] Agree[2] Undecided[3] Disagree[4] Strongly disagree[5]
2. The driver of an automobile should be the sole judge of the mechanical fitness of his car.
   Strongly disagree[1] Disagree[2] Undecided[3] Agree[4] Strongly agree[5]
3. Drivers who pass on hills and curves should be considered incompetent.
   Strongly agree[1] Agree[2] Undecided[3] Disagree[4] Strongly disagree[5]
4. Hit-and-run drivers should be classified as criminals.
   Strongly agree[1] Agree[2] Undecided[3] Disagree[4] Strongly disagree[5]
5. Drivers who have the right of way need not be concerned about sharing the road.
   Strongly disagree[1] Disagree[2] Undecided[3] Agree[4] Strongly agree[5]
6. A person should be permitted to drive a car only as long as he does not abuse his privilege.
   Strongly agree[1] Agree[2] Undecided[3] Disagree[4] Strongly disagree[5]
7. The drinking of alcohol by drivers should be a matter for the consideration of the drivers alone.
   Strongly disagree[1] Disagree[2] Undecided[3] Agree[4] Strongly agree[5]
8. Prospective drivers should take a course in the driving of the automobile.
   Strongly agree[1] Agree[2] Undecided[3] Disagree[4] Strongly disagree[5]
9. Strict enforcement of traffic regulations is the only way to prevent accidents.
   Strongly agree[1] Agree[2] Undecided[3] Disagree[4] Strongly disagree[5]
10. Pedestrians should at all times be solely responsible for their own safety.
    Strongly disagree[1] Disagree[2] Undecided[3] Agree[4] Strongly agree[5]
11. Every driver should be required to have his car inspected twice a year.
    Strongly agree[1] Agree[2] Undecided[3] Disagree[4] Strongly disagree[5]
12. Drivers who disregard traffic regulations should be punished only if they cause damage or injury.
    Strongly disagree[1] Disagree[2] Undecided[3] Agree[4] Strongly agree[5]
13. Most drivers lack the ability to control automobiles at high speed.
    Strongly agree[1] Agree[2] Undecided[3] Disagree[4] Strongly disagree[5]
14. Because "things just happen" one should not be concerned with the prevention of accidents.
    Strongly disagree[1] Disagree[2] Undecided[3] Agree[4] Strongly agree[5]
15. Drivers who handle cars carefully should not be denied the right to drive on public highways.
    Strongly agree[1] Agree[2] Undecided[3] Disagree[4] Strongly disagree[5]
16. Drivers convicted of hit-and-run accidents should have their licenses revoked.
    Strongly agree[1] Agree[2] Undecided[3] Disagree[4] Strongly disagree[5]
17. The driver of a car should decide when it is safe to pass on curves.
    Strongly disagree[1] Disagree[2] Undecided[3] Agree[4] Strongly agree[5]
18. A person should pass a physical examination before being issued a driver's license.
    Strongly agree[1] Agree[2] Undecided[3] Disagree[4] Strongly disagree[5]
19. A tired motorist should drive slowly until the drowsiness leaves him.
    Strongly disagree[1] Disagree[2] Undecided[3] Agree[4] Strongly agree[5]

105

20. The rudeness of traffic officers discourages courtesy on the part of the motorist.
Strongly agree[1] Agree[2] Undecided[3] Disagree[4] Strongly disagree[5]

21. The sturdy construction of automobiles assures safety at any speed.
Strongly disagree[1] Disagree[2] Undecided[3] Agree[4] Strongly agree[5]

22. Examinations for drivers' licenses should be required of all persons once a year.
Strongly agree[1] Agree[2] Undecided[3] Disagree[4] Strongly disagree[5]

23. The present emphasis on the enforcement of traffic rules should be reduced.
Strongly disagree[1] Disagree[2] Undecided[3] Agree[4] Strongly agree[5]

24. Every motorist should be required to pass a driving-skill test once in five years.
Strongly agree[1] Agree[2] Undecided[3] Disagree[4] Strongly disagree[5]

25. Motorists should be permitted to run signals and lights when there is no cross traffic approaching.
Strongly disagree[1] Disagree[2] Undecided[3] Agree[4] Strongly agree[5]

26. Inexperienced drivers should not be arrested for running through traffic lights.
Strongly disagree[1] Disagree[2] Undecided[3] Agree[4] Strongly agree[5]

27. To accommodate the traffic, the coöperation of all drivers is necessary.
Strongly agree[1] Agree[2] Undecided[3] Disagree[4] Strongly disagree[5]

28. The occurrence of accidents is a matter of chance and should be regarded as unavoidable.
Strongly disagree[1] Disagree[2] Undecided[3] Agree[4] Strongly agree[5]

29. Until a person passes a driving-skill test he should not be granted a license to drive.
Strongly agree[1] Agree[2] Undecided[3] Disagree[4] Strongly disagree[5]

30. A driver really is the best judge of the speed he should be permitted to drive.
Strongly disagree[1] Disagree[2] Undecided[3] Agree[4] Strongly agree[5]

31. Drivers convicted of driving while under the influence of liquor should have their licenses revoked.
Strongly agree[1] Agree[2] Undecided[3] Disagree[4] Strongly disagree[5]

32. People are as courteous "behind the wheel" as they are at any other time.
Strongly disagree[1] Disagree[2] Undecided[3] Agree[4] Strongly agree[5]

33. Every driver should be required to pass an examination on the rules of the road.
Strongly agree[1] Agree[2] Undecided[3] Disagree[4] Strongly disagree[5]

34. No person should be denied the right to drive an automobile.
Strongly disagree[1] Disagree[2] Undecided[3] Agree[4] Strongly agree[5]

35. Examinations for drivers' licenses should be difficult enough to eliminate persons who are physically unfit and emotionally unstable.
Strongly agree[1] Agree[2] Undecided[3] Disagree[4] Strongly disagree[5]

36. Pedestrians should yield the right of way to motorists.
Strongly disagree[1] Disagree[2] Undecided[3] Agree[4] Strongly agree[5]

37. Drivers of automobiles should be more concerned with the welfare of their passengers than of themselves.
Strongly agree[1] Agree[2] Undecided[3] Disagree[4] Strongly disagree[5]

38. Improved construction of automobiles makes driving skill less necessary today than five years ago.
Strongly disagree[1] Disagree[2] Undecided[3] Agree[4] Strongly agree[5]

39. Driving is a cooperative affair in which the motorists share alike on the highways.

Strongly agree[1] Agree[2] Undecided[3] Disagree[4] Strongly disagree[5]

40. Drivers with many years of experience should not be required to submit to reexamination in later years.

Strongly disagree[1] Disagree[2] Undecided[3] Agree[4] Strongly agree[5]

Answer only one — EITHER (A) OR (B)

(A) *If you now drive*, rate yourself as a driver by placing an *x* at that point along the line below from VERY POOR to EXPERT DRIVER which you believe will indicate the kind of driver you are:

VERY POOR . . . . . EXPERT DRIVER

(B) *If you do not now drive but hope to*, rate yourself as to the kind of driver you hope to become by placing an *x* at that point along the line below from VERY POOR to EXPERT DRIVER which you believe will best indicate the kind of driver you will be:

VERY POOR . . . . . EXPERT DRIVER

THE McGLADE ROAD TEST SCORE SHEET

Francis S. McGlade, Ph. D.

REPRINT

ITEM (Applicable Number of Trials Given in Parentheses)	Score FAIR	BAD
1. Prior to Start (1)	3	6
2. Start, Pull Out (1)	5	10
3. Backing, 50 Feet (1)	3	6
4. Turnabout (1)	3	6
5. Parallel Park		
By Curb (1)	3	6
Between Standards (1)	3	6
6. Shifting Gears	3	6
7. Use of Accelerator	3	6
8. Park, Uphill (1)	5	10
9. Start on Upgrade (1)	3	6
10. Lane Observance	5	10
11. Intersection Observance	5	10
Blind (1)		
Uncontrolled, Going Straight Through (2)		
Uncontrolled, Turning (2)		
12. Intersection Speed	5	10
13. Speed Control	5	10
14. Following	5	10
15. Right of Way	5	10
16. Steering	5	10
17. Attention	5	10
18. Defensive Driving	5	10
19. Unfamiliar with Rules	5	10
20. Use of Clutch (Standard Transmission Only)	5	10
21. Use of Footbrake	5	10
22. Use of Mirror	5	10

ITEM	Trial	FAIR	BAD
23. SLOW and Other Signs	First	1.0	2
	Second	1.0	2
	Third	1.0	2
24. STOP Signs	First	2.5	5
	Second	2.5	5
25. Traffic Lights	First	2.5	5
	Second	2.5	5
26. Change Lanes	First	2.5	5
	Second	2.5	5
27. Right Turns	First	1.5	3
	Second	1.5	3
	Third	1.5	3
28. Left Turns	First	1.5	3
	Second	1.5	3
	Third	1.5	3

DEDUCTIONS	FAIR	BAD	Total
From Left Column			
From Right Column			
GRAND TOTAL			

GROUNDS FOR IMMEDIATE REJECTION
(Circle Applicable Item Number)
1. Accident 2. Dangerous Action 3. Clear Violation 4. Lack of Cooperation, Refusal to Perform Offer of Gratuity

Applicant PASSES / FAILS

Examiner

(By permission of The Center for Safety, New York University)

DRIVER EDUCATION PROGRAM
PSYCHOPHYSICAL TEST RECORD

NAME _____ SCHOOL _____

ADDRESS _____ AGE ____ CLASS ____ ROOM ____

DATE _____ SEX _____ INSTRUCTOR _____

PERIPHERAL VISION TEST

RIGHT _____ LEFT _____ TOTAL _____ AVERAGE 180°+ MINIMUM 140°

Depth Perception Test
(Measure in Inches)

	Over	Under
1.		
2.		
3.		
4.		
5.		
6.		
Average		

VISUAL ACUITY

Right	Left	Both

N.Y. M.V.D. Std. 40/40

NIGHT VISION

TEST 1. _____
2. _____
3. _____

CLASS AVERAGE _____

REACTION TIME

_____ seconds
Average = .75 second

GLARE RECOVERY

Measure in seconds with Stop Watch

TEST 1. _____
TEST 2. _____
TEST 3. _____

COLOR VISION

	Right	Left
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		

COLOR SENSITIVITY _____

INSENSITIVE TO _____

AGREEMENT FOR USE OF DUAL CONTROL CAR

I. THE AAA AUTOMOBILE CLUB AGREES TO:

1. Assist the school in securing the loan of a current model automobile.
2. Process car agreements under the AAA Driver Education Car Assignment Program and provide for notification of the automobile manufacturer.
3. Provide identifying decals to the Dealer at no charge.

II. THE SCHOOL AGREES TO:

1. Conduct a high quality Driver Education course with practice driving meeting the requirements of the State Department of Public Instruction where such requirements have been set up, otherwise, the following minimum requirements:
   30 Clock Hours Per Student of Classroom Instruction
   6 Clock Hours Per Student of Practice Driving (exclusive of time spent in the car as an observer)
2. Provide an instructor who has completed special Driver Education teacher preparation of a minimum of 40 clock hours and is otherwise approved by the State Department of Public Instruction. In States which have minimum requirements in excess of 40 clock hours, the State requirements will be considered as a minimum for car assignment.
3. Use the car exclusively for driver education activities, and have a qualified driver education instructor present at all times the car is in operation.
4. Make certain that there is insurance coverage for the protection of the School, the Dealer, the Instructor, other users of the car and list the local AAA Club as "Additional Assured." The coverage should include, but need not be limited to (A) 100-300 thousand dollars Public Liability, (B) 10 thousand dollars Property Damage, (C) 100 dollars Deductible Collision, (D) Comprehensive—Fire, Theft and Tornado Insurance.
5. In the event that the vehicle is damaged, report promptly any such damage to the Dealer and to the insurance company.
6. Identify the car as a "Driver Education Car" and with a Dealer courtesy line 1½ inches high.
7. Have vehicle maintenance done to the satisfaction of the Dealer and pay all operational and maintenance expenses.
8. Properly maintain the appearance of the car.
9. Provide garaging for the vehicle to the satisfaction of the Dealer.
10. Return the car to the Dealer on expiration of assignment and pay for servicing or repairs necessary to put the car in the same condition as received, except for normal wear and tear.

III. THE LOCAL DEALER AGREES TO:

1. Provide the School for its EXCLUSIVE use a current model car(s) properly licensed, equipped with dual controls, outside mirrors on both right and left, and heater with defroster where required, for the period noted.

Number of Cars Covered by This Agreement:
Make of Car ____ Year
Type of Transmission
Period: ____ to ____

This agreement shall take effect when SIGNED by persons authorized for the organizations involved.

SCHOOL	AAA CLUB
Street	Street
City ____ State	City ____ State
Signature for school	Signature for club
Title	Title
DEALER	Date of last signature
Street	
City ____ State	
Signature for dealer	
Title	

DRIVER EDUCATION PROGRAM

STUDENT INSURANCE DISCOUNT ELIGIBILITY CERTIFICATE

Date_____

To Whom It May Concern:

This is to certify that _____ completed an approved Driver Education Course at _____ _____High School.

The course consisted of 30 hours of classroom instruction in the theory of Driver Education, and 6 hours of behind-the-wheel, on-the-road practice driving.

Very truly yours,

_____

Principal, or Driver Education Instructor

Board of Education of the City of New York
Office of Instructional Services
BUREAU OF CURRICULUM DEVELOPMENT
131 Livingston Street, Brooklyn, New York 11201

DRIVER EDUCATION PROGRAM — DUAL-CONTROL CAR INSPECTION RECORD

SCHOOL _____ HS — YEAR ENDING _____

SCHOOL ADDRESS _____

DEALER'S NAME _____

DEALER'S ADDRESS _____

MAKE OF CAR _____ BODY TYPE _____ IDENTIFICATION NO. _____

DATE RECEIVED _____ MILEAGE _____ DATE RETURNED _____ MILEAGE _____

CONDITION WHEN RECEIVED	CONDITION WHEN RETURNED

CHECK ALL ITEMS IN SATISFACTORY CONDITION. WRITE IN ANY DEFECTS NOTED.

BODY	
Hood	
R.H. Doors	
L.H. Doors	
Trunk	
Front Fenders	
Rear Fenders	
Front Bumper	
Rear Bumper	
Brakes	
Transmission	
Dual Controls	
Electrical	
Engine	
Cooling System	
Heater, (A/C)	
Accessories	
Lights	
Steering	
Tires	
Wheels	
Upholstery	
Interior	

Other Comments _____

Signature, School Official — Signature, Dealer representative

Title — Title

SCHOOL DRIVER EDUCATION PROGRAM

PERIODIC MAINTENANCE SCHEDULE FOR DRIVER EDUCATION CARS

Car No._____License_____School_____

Date_____to_____Make of Car_____

INSPECTION AND SERVICE

Item	Daily	Weekly	Monthly
Appearance (body finish)			
Tires (visual check)			
Windows and Windshield (clean)			
Lights			
Fuel Level			
Engine Oil Level			
Brake Pedal Reserve			
Directional Signals			
Gauges Other Than Fuel			
Windshield Washer Fluid			
Brake Fluid Reservoir			
Cooking System Liquid			
Battery Water Level			
Tire Pressure			
Automatic Transmission Fluid Level			
Wash Car; Clean Interior			
Lubrication; Change Oil			

DIGEST OF PERTINENT SECTIONS:

NEW YORK STATE MOTOR VEHICLE AND TRAFFIC LAW

This section of the Appendix contains a digest of pertinent sections of the New York State Motor Vehicle and Traffic Law as well as excerpts from it. It also contains excerpts from the handbook of New York City Traffic Regulations. For complete and exact wording of the material in this section see the above handbooks. It is strongly recommended that each teacher of Driver Education have in his possession a current copy of each of the above publications. Copies of the New York State Motor Vehicle and Traffic Law may be obtained at branch offices of the Motor Vehicle Department at $1.00 each. Copies of the New York City Traffic Regulations may be obtained from the New York City Department of Traffic.

Article 14, Section 401 — Registration

If you are a resident of New York State and own a motor vehicle which is operated on the public highways, it must be registered with the Department of Motor Vehicles. Registration certificates and number plates may be obtained from Department District Offices in the Counties of New York, Queens, Kings, Bronx, Richmond and Albany, and in County Clerks' offices in other counties.

Original Registration Procedure

To register a vehicle for the first time, you will need to provide proof of ownership such as a certificate of sale from a dealer or a previous registration renewal stub (Stub #2) properly signed over to you. You must also furnish proof of financial security (usually liability insurance), proof that it has been inspected and passed under the Periodic Inspection Law and proof that the sales tax has been paid.

The above material together with the completed and signed registration application must be taken or sent to the nearest branch office of the Motor Vehicle Department. The correct fee must be included.

Registration Fees

Fees for passenger cars and station wagons are as-follows:

For cars weighing up to 3500 lbs—$.75 per 100 lbs.

For cars weighing over 3500 lbs—$.75 per 100 lbs. for the first 3500 lbs.

All excess weight over 3500 lbs—$1.12½ per 100 lbs.

Minimum fee for six, eight, or twelve cylinder motor vehicles—$15.00

Registration Renewals

To renew the registration before the old one expires you need only the old certificate's valid renewal stub (Stub #2), a properly filled in application, an insurance identification card, proof of inspection, and the correct fee. Registrations must be renewed annually within the 30-day period prior to the expiration date shown on the registration certificate.

Article 19, Section 501 — Operator's Licenses

Any person who drives a motor vehicle of any description on the public highways, public parking lots, public garages, car washing establishments, or who drives across sidewalks in New York State must have some type of driver's license.

Type of Licenses

Chauffeur's Licenses (Classes I, II, III, Unclassified)
Operator's License
Junior Operator's License
Motorcycle Operator's License
Combination Motorcycle and Chauffeur
Combination Motorcycle and Operator

Chauffeur's License Classification and Privileges

CLASS I—Allows holder to drive any motor vehicle except a motorcycle.

CLASS II—Allows holder to drive trucks without trailers, buses, taxicabs, passenger cars.

CLASS III—Four-wheeled trucks over 18,000 lbs. gross weight, taxicabs, passenger cars.

UNCLASSIFIED Taxicabs, trucks under 18,000 lbs. gross weight, instructor in driving school, passenger cars.

Privileges Allowed License Holders of the Following License

OPERATOR'S—may drive any passenger car, station wagon or light delivery truck as long as no compensation is given for driving.

JUNIOR OPERATOR'S—same as operator's except that driving must be done during dayilght hours unless attending credit bearing evening school or college courses.

Junior Operator's Licenses are not valid in New York City or Nassau County.

MOTORCYCLE OPERATOR'S—required for operating motorcycles, motor bicycles or scooters.

Licensing Procedure

REQUIREMENTS:

Minimum age—18 (Junior Operator's—16)

Vision—20/40 in either or both eyes

Physical—be physically able to control automobile

Passing of written, knowledge, and eventually, road tests administered by Motor Vehicle Department.

FEES

Learner's Permit—$5.00 (good for one year)

Operator's and Junior Operator's License—$3.00

Chauffeur's License—$6.00

Amended License (change of classification)—$1.00

Renewal fees are the same as for original licenses.

Licenses and renewals are for 3-year periods.

New licenses are probationary for six months; a single conviction for speeding, reckless driving, tailgating, or driving under the influence of drugs or alcohol, will cancel a probationary license.

Two convictions in the probationary period for any other moving violation will also cause a probationary license to be cancelled.

Restrictions on Licenses

Corrective lenses must be worn if eyesight does not meet minimum requirements. This information is stamped on the license.

Panoramic rear-view mirrors must be used by deaf drivers who are forbidden to drive any car not equipped.

Physically handicapped drivers are restricted to cars especially equipped to fit their deficiencies.

Digest of Pertinent Rules of the Road

From Title VII, Articles 23, 24, 25, Sections 1101-1145, New York State Motor Vehicle and Traffic Law (1966-67 Edition)

Obedience to Directions

Sec. 1102—All operators of *any* Vehicles and all pedestrians must comply with any lawful direction or order given by a police officer empowered to regulate traffic.

Emergency Vehicles

Sec. 1104—Emergency vehicles when responding to an emergency have the right of way; however drivers of these vehicles when responding to emergencies are obligated to exercise due care.

Observance of Traffic Signals

Sec. 1110—Everyone must obey traffic signals applicable to him unless directed otherwise by a traffic officer, except those emergency vehicles actually responding to an emergency.

Green Signal

Sec. 1111—Vehicular traffic may proceed straight, right, or left on a green circular signal unless signs prohibit right or left turns.

Vehicles proceeding right or left on green however must give right-of-way to pedestrians on the adjacent cross walk lawfully obeying the signal.

Green Arrow

Vehicular traffic facing a green arrow shown alone or in combination with other signals may proceed cautiously in the direction indicated by the arrow. They must, however, yield the right-of-way to pedestrians lawfully within the adjacent cross walk.

Yellow Signal

Moving vehicular traffic in the vicinity of an intersection may continue to proceed through the intersection on the amber or yellow signal which warns that the green signal is being terminated and that the red or stop signal will immediately follow.

Pedestrians should not cross intersections on the yellow signal.

A dark period, or simultaneous lighting of green and red signals on a two-light signal system has similar meaning as above.

Red Signal

Red signal means all vehicular and pedestrian traffic stops. If special pedestrian control signals are in use, pedestrians follow these signals.

Flashing Signals

Whenever flashing red or yellow signal lights are used, they have the following meaning: *Flashing Red*—Full stop then proceed when safe. *Flashing Yellow*—Slow and proceed with caution.

Keeping to the Right

1120. All traffic shall keep to the right of the roadway with the following exceptions:

1. When overtaking or passing a slow moving vehicle travelling in the same direction.
2. When passing pedestrians or obstructions in the roadway.
3. On a multi-lane highway divided into marked lanes for traffic or on a one-way street or road.

Slow moving vehicles *must keep* to the right except when passing or turning left.

Passing

When passing, pass on the left of the overtaken vehicle except when passing on the right is permitted. The vehicle overtaken shall give way in favor of the overtaking vehicle on audible signal. The vehicle being passed must not increase his speed while being passed.

Passing on the right is permitted under the following circumstances:

1. When overtaken vehicle is turning left
2. On multi-lane highways
3. On one-way streets

No passing should take place on two-way roads where a double solid diving marker exists.

Following Too Closely

1129 – No driver of a vehicle shall follow another vehicle more closely than is reasonable and prudent having due regard for the speed at which the vehicles are moving, and surrounding traffic conditions.

158

Motorcycles

1252—Motorcycles shall not oe driven more than two abreast in any single traffic lane whether the lane is marked or unmarked.

Motorcycles must not be driven between rows of cars in traffic, and when passing, must pass to the left.

Right-of-Way

1140—When two vehicles approach an intersection from highways of equal importance, the vehicle approaching on the right has the right-of-way.

Turning Left

When a vehicle is turning left at an intersection it must yield the right-of-way to vehicles proceeding straight through the intersection from the opposite direction.

Stop Signs

All vehicles except emergency vehicles responding to an emergency, must stop at any intersection controlled by a "Stop" sign facing traffic, and must remain stopped until the intersection is clear and it is safe to proceed.

Yield Signs

All vehicles approaching an intersection marked by a "Yield" sign may proceed cautiously through the intersection unless there are vehicles approaching on the cross street. In this case vehicles facing the "Yield" signs must stop until the other vehicles have cleared the intersection. All vehicles must stop at railroad crossing on signal.

Passing School Bus

All vehicles overtaking a school bus, outside New York City, must stop when the school bus stops and may not proceed until the flashing signals on the bus cease to operate or until the bus operator signals traffic to proceed.

Speed Limit

The statutory speed limit in New York State on the highway is 55 miles per hour unless otherwise posted. In addition, no vehicle shall be driven at a speed greater than is reasonable and proper for existing conditions.

EXCERPTS:

NEW YORK STATE MOTOR VEHICLE AND TRAFFIC LAW

STATE TRAFFIC COMMISSION

Excerpts—relating to pavement markings—from Manual of Uniform Traffic Devices

SECTION 261.1. BROKEN LINE (a) The broken line — — — — — is used to define traffic lanes and as the normal center line on two-lane pavements. It is intended merely to guide traffic and it may be crossed from either side at the discretion of the driver.

SECTION 261.2. SOLID LINE. (a) The solid line ——— is a warning line used to indicate that traffic should keep in lane. It is not a regulatory line and shall never be used to prohibit passing.

SECTION 261.4. BARRIER LINES. Barrier Lines shall be used only between opposing streams of traffic. They are regulatory markings and shall be used only as prescribed in this Chapter.

(a) PARTIAL BARRIER. The partial barrier - - - - - is a double line marking consisting of a solid yellow line and a parallel broken white line.

The partial barrier on two-lane and three-lane roadways shall be the markings which defines a no-passing zone for traffic in one direction. Vehicles proceeding along the highway in the direction which places the solid line to the right of the broken line may not be driven on the left side of the partial barrier. Vehicles proceeding in the opposite direction, i.e., the direction which places the solid line to the left of the broken line, are not prohibited from driving on the left side of the partial barrier and hence may cross the partial barrier at the discretion of the drivers.

(b) FULL BARRIER. The full barrier ═══ is a double line marking consisting of two parallel solid yellow lines.

Vehicles proceeding in either direction along a highway may not be driven on the left side of a full barrier. The full barrier on a two-lane roadway shall be the marking which defines a no-passing zone for traffic in both directions.

SECTION 262.12 (b). When official markings are in place defining spaces where parking is permitted, no person shall stand or park a vehicle in such parking space so that any part of such vehicle occupies more than one such space or protrudes beyond the markings defining such a space, except that a vehicle which is of a size too large to be parked within a single parking space shall be parked extending as little as possible into the adjoining space or spaces.

301. Periodic inspection of all motor vehicles. (a) The commissioner shall require that every motor vehicle registered in this state be inspected once each year in accordance with the provisions of this article.

(c) (1) Such inspection shall be made with respect to the brakes, steering mechanism, wheel alignment, lights, and such other mechanisms and equipment as shall be determined by the commissioner to be necessary for proper and safe operations.

312. REGISTRATION OF MOTOR VEHICLES. 1. No motor vehicle shall be registered in this state unless the application for such registration is accompanied by proof of financial security which shall be evidenced by a certificate of insurance or evidence of a financial security bond, a financial security deposit or qualification as a self-insurer under section three hundred sixteen; provided that upon renewal of registration with respect to registration years commencing on or after January 1st, 1958, an application accompanied by a certificate of registration or renewal stub in force immediately preceding the date of application for renewal, together with a statement by the applicant certifying that there is in effect proof of financial security, shall meet the requirements of this section.

316. SELF-INSURERS. The commissioner may, in his discretion, upon the application of a person having registered in his name in this state more than twenty-five motor vehicles, issue a certificate of self-insurance when he is reasonably satisfied that such person is possessed and will continue to be possessed of financial ability to respond to judgments obtained against such person, arising out of the ownership, maintenance, use or operation of any such person's motor vehicles. Upon due notice and hearing, the commissioner may, in his discretion and upon reasonable grounds, cancel a certificate of self-insurance.

EXCERPTS:

NEW YORK CITY TRAFFIC REGULATIONS

Article 3: TRAFFIC SIGNALS

30. TRAFFIC CONTROL SIGNAL LEGEND.

Whenever traffic is controlled by traffic control signals exhibiting different colored lights successively, the following colors shall indicate and apply to drivers of vehicles and to pedestrians, except as superseded by pedestrial control signals, as follows:

(a) GREEN ALONE:

1. Vehicular traffic facing such signals may proceed straight through or turn right or left unless a sign at such place prohibits either such turn. But vehicular traffic, including vehicles turning right or left, shall yield the right of way to other vehicles and to pedestrians lawfully within the intersection or an adjacent crosswalk at the time such signal is exhibited.

2. Pedestrians facing such signal may proceed across the roadway within any marked or unmarked crosswalk.

(b) STEADY YELLOW ALONE, DARK PERIOD, OR RED-GREEN COMBINED WHEN SHOWN FOLLOWING THE GREEN SIGNAL:

1. Vehicular traffic facing such signal is thereby warned that the red signal will be exhibited immediately thereafter and such vehicular traffic shall not enter the intersection when the red signal is exhibited.

2. Pedestrians facing such signal are thereby warned that there is insufficient time to cross the roadway, and any pedestrian then starting to cross shall yield the right of way to all vehicles.

(c) STEADY RED ALONE:

1. Vehicular traffic facing such signal shall stop before entering the crosswalk on the near side of the intersection or, if none, then before entering the intersection and shall remain standing until an indication to proceed is shown.

2. Any pedestrian facing such signal shall yield the right of way to all vehicles and shall not enter or cross the roadway unless he can do so safely and without interfering with any vehicular traffic.

(d) ARROWS.

When colored lights shaped as arrows are used as traffic control signals, arrows pointing to the right shall apply to drivers, intending to enter the intersection to turn to the right, arrows pointing vertically shall apply to drivers intending to enter the intersection to proceed straight through, and arrows pointing to the left shall apply to drivers intending to enter the intersection to turn to the left. The colors of arrows shall have the same meanings as colors of traffic signal lights, but shall apply only to drivers intending to enter the intersection to proceed in the direction controlled by the arrow.

(e) Vehicular traffic shall obey signs requiring obedience to traffic control signals at intersections other than those at which such signals are located.

(f) In the event an official traffic control signal is erected and maintained at a place other than an intersection, the provisions of this section shall be applicable except as to those provisions which by their nature can have no application. Any stop required shall be made at a sign or marking on the pavement indicating where the stop shall be made, but in the absence of any such sign or marking the stop shall be made at the signal.

(g) Notwithstanding the foregoing provisions of this section, a driver approaching an intersection where a sign authorizes right or left turns on red signal may make such turn, but shall yield the right of way to all vehicles and pedestrians lawfully within the intersection.

31. PEDESTRIAN SIGNALS.

Whenever pedestrian control signals exhibiting the words "WALK" and "DON'T WALK" successively are in operation, such signals shall indicate as follows:

(a) WALK.

Pedestrians facing such signal may proceed across the roadway in the direction of the signal in any marked or unmarked crosswalk. Vehicular traffic shall yield the right of way to such pedestrians.

(b) FLASHING DON'T WALK.

Pedestrians facing such signal are warned that there is insufficient time to cross the roadway and no pedestrian shall enter the roadway. Pedes-

trians already in the roadway shall proceed to the nearest safety island or sidewalk. Vehicular traffic shall yield the right to such pedestrians.

(c) STEADY DON'T WALK.

No pedestrian facing such signal shall enter the roadway when the steady Don't Walk is shown.

Article 5: TURNS

50. OBEDIENCE TO TURNING RESTRICTIONS.

Whenever a traffic control device prohibits any turn or other movement at an intersection or other location, no driver of any vehicle shall disobey the direction of such device.

51. LIMITATIONS ON TURNING AROUND.

(a) The driver of any vehicle shall not turn such vehicle so as to proceed in the opposite direction upon any street in a business district.

(b) The driver of a vehicle shall not turn such vehicle around so as to proceed in the opposite direction upon any street outside a business district unless such turn is made without interfering with the right of way of any vehicle or pedestrian.

Article 6: SPEED RESTRICTIONS

60. MAXIMUM SPEED LIMITS AND BASIC RULE.

(a) No person shall drive a vehicle at a speed greater than thirty miles per hour except where official signs indicate a different maximum speed limit.

(b) Where official signs indicating a maximum speed limit are posted, no person shall drive a vehicle at a speed greater than such maximum speed limit.

(c) Notwithstanding the foregoing provisions of this section, no person shall drive a vehicle on a highway at a speed greater than is reasonable and prudent under the conditions and having regard to the actual potential hazards then existing. In every event, speed shall be so controlled as may be necessary to avoid colliding with any person, vehicle, or other conveyance on or entering the highway in compliance with legal requirements and the duty of all persons to use due care.

Article 7: OTHER RESTRICTIONS ON MOVEMENT

70. YIELD SIGNS.

The driver of a vehicle approaching a YIELD RIGHT-OF-WAY SIGN shall slow to a reasonable speed for existing conditions of traffic and visibility, stopping if necessary, and shall yield the right-of-way to all traffic on the intersecting street which is so close as to constitute an immediate hazard. Proceeding past such sign with resultant collision or other impedance or interference with traffic on the intersecting street shall be deemed prima facie in violation of this regulation.

71. STOP WHEN TRAFFIC OBSTRUCTED.

No driver shall enter an intersection unless there is sufficient unobstructed space beyond the intersection to accommodate the vehicle he is operating, notwithstanding any traffic-control signal indication to proceed.

72. RESTRICTIONS ON CROSSING SIDEWALKS.

(a) No person shall drive within any sidewalk area except at a permanent or temporary driveway.

(b) No person shall drive across a sidewalk or upon a driveway in order to avoid an intersection.

73. RESTRICTIONS ON BACKING.

No person shall back a vehicle into an intersection or over a crosswalk and shall not in any event or at any place back a vehicle unless such movement can be made in safety.

74. PLAY STREETS.

Whenever authorized signs are erected indicating any street or part thereof as a play street or play area, no person shall drive a vehicle upon any such street or area between 8 A.M. and one-half hour after sunset, unless other hours are prescribed by signs; except drivers of vehicles having business or whose residences are within such restricted area. Any such driver shall exercise the greatest care in driving upon any such street.

75. RESTRICTIONS ON LEARNERS.

(a) A driver with a learner's permit shall not operate a motor vehicle

165

in any park, on any play street, or along any block in which there is an entrance to a public playground or park.

(b) The licensed operator accompanying a driver with a learner's permit shall not permit such learner to violate this regulation.

TEACHING, SAFETY, AND TEST EQUIPMENT

Following is a partial list, alphabetically arranged, of equipment available and the names and addresses of the suppliers.

Automobile Identification Signs

American Automobile Association, 1712 G St. N.W., Washington, D.C. 20006

Bumpa-Tel Inc., P.O. Box 611, Cape Girardeau, Mo. 63701

Lake Automotive Products Co., 531 Woodbine Ave., Oak Park, Ill. 60302

Brake Reaction Detonators

American Automobile Association, 1712 G St. N.W., Washington, D.C. 20006

Dual Controls

American Automobile Association, 1712 G. St. N.W., Washington, D.C. 20006

Associated Engineering Service, 23-15 122 St., College Point, N.Y. 11356

Auto Brake Control Co., 900 N. Vermont Ave., Los Angeles 29, Calif.

Portable Dual Controls Inc., 1533 Grand River Ave., Detroit 8, Mich. 48208

Stromberg Hydraulic Brake and Coupling Co., 5443 Northwest Highway, Chicago, Ill. 60630

Marker Flags

Bumpa-Tel Inc., P.O. Box 611, Cape Girardeau, Mo. 63701

Davis and Box Co., 3549 Bryn Mawr Ave., Dallas, Texas 75225

Overhead Projectors

Keystone View Co., Meadville, Pa., 16335

Porto-Clinic Instruments Inc., Harrisburg, Pa. 17105

Psychological Apparatus

American Automobile Association, 1712 G St. N.W., Washington, D.C. 20006

American Optical Co., Southbridge, Mass. 01550

Bausch and Lomb, Rochester, N.Y. 14602

Educational Device Co., 101 E. Chicago Blvd., Tecumseh, Mich. 49286

Stanley L. Heyburn Inc., 4949 Edgemere Ave., Baltimore, Md., 21215

Keystone View Co., Meadville, Pa. 16335

Porto-Clinic Instruments Inc., Harrisburg, Pa. 17105

Reaction Time Tests

American Automobile Association, 1712 G St. N.W., Washington, D.C. 20006

C. H. Stoelting Co., 424 N. Homan Ave., Chicago, Ill. 60624

Educational Device Co., 101 E. Chicago Blvd., Tecumseh, Mich. 49286

Stanley L. Heyburn Inc., 4945 Edgemere Ave., Baltimore, Md. 21215

Lafayette Instruments Co., Box 57, N. 26 St., Lafayette, Ind. 47902

Porto-Clinic Instruments Inc., Harrisburg, Pa. 17105

Simulator Equipment

Aetna Life and Casualty Co., 151 Farmington Ave., Hartford, Conn. 06115

American Automobile Association, 1712 G St. N.W., Washington, D.C. 20006

Link Group, General Precision, Inc., Binghamton, N.Y. 13902

Spot Markers

Traffic Safety Supply Co., 2636 N.E. Sandy Blvd., Portland, Ore. 97232

167

STANCHIONS

American Automobile Association, 1712 G St. N.W., Washington, D.C. 20006

Davis and Box Co., 3549 Bryn Mawr Ave., Dallas, Texas 75225

STRENGTH TESTS

C. H. Stoelting Co., 424 N. Homan Ave., Chicago, Ill. 60624

Lafayette Instrument Co., Box 57 N. 26 St., Lafayette, Ind. 47902

Marietta Apparatus Co., 118 Maple St., Marietta, Ohio 45750

TEACHING MACHINES

Aetna Life and Casualty Co., 151 Farmington Ave., Hartford, Conn. 06115

Keystone View Co., Meadville, Pa. 16335

TRAFFIC BOARDS

American Automobile Association, 1712 G St. N.W., Washington, D.C. 20006

Bumpa-Tel Inc., P.O. Box 611, Cape Girardeau, Mo. 63701

J. J. McIntosh Co., 30 S. Court House Ave., Carlisle, Pa., 17013

Lake Automotive Products Co., 531 Woodbine Ave., Oak Park, Ill. 60302

Magno-Saf-T Board, Emigsville, Pa. 17318

Obie Flock-Cote Co., 5713 Euclid Ave., Cleveland, Ohio 44103

Onavisual Co., Inc., Box 11150, St. Petersburg, Fla. 33733

Porto-Clinic Instruments Inc., Harrisburg, Pa. 17105

Ready-Make Sign Co., Inc., 115 Worth St., New York, N.Y. 10013

Sales Aid Co., 350 Nassau St., Princeton, N.J. 085[illegible]0

Scioto Sign Co., Inc., 364 Vine St., Kenton, Ohio 43326

TRAFFIC CONES

Davis Emergency Equip. Co., Inc., 150 Hallech St., Newark, N.J. 07104

Heller Industries Inc., Suite 1714 Marine Plaza, Milwaukee, Wis. 53202

Radiator Specialty Co., Charlotte, N.C. 28202

Ready-Made Sign Co., 115 Worth St., New York, N.Y. 10013

Rodgers Co., Hackensack, N.J. 07601

Western Marketing Service, P.O. Box 566, Union City, N.J. 07087

TRANSPARENCIES

International Textbook Co., Scranton, Pa. 18515

Popular Science Publishing Co., 355 Lexington Ave., New York, N.Y. 10017

Porto-Clinic Instruments Inc., Harrisburg, Pa. 17105

Robert J. Brady Co., 130 G St. N.E., Washington, D.C. 20002

VISION TESTS

American Automobile Association, 1712 G St. N.W., Washington, D.C. 20006

American Optical Co., Southbridge, Mass. 01550

Bausch and Lomb, Rochester, N.Y. 14602

Educational Device Co., 101 E. Chicago Blvd., Tecumseh, Mich. 49286

Keystone View Co., Meadsville, Pa. 16335

Lafayette Instrument Co., Box 57, N. 26 St., Lafayette, Ind. 47902

Porto-Clinic Instruments Inc., Harrisburg, Pa. 17105

Titmus Optical Co., Inc., Petersburg, Va. 23803

WORKING MODELS

American Automobile Association, 1712 G St. N.W., Washington, D.C. 20006

Carl A. Munn, 388 Lafayette Ave., Buffalo, N.Y. 14213

Viking Importers, 113 S. Edgemont St., Los Angeles, Calif. 90004

Resources

Curriculum Guides

Aetna Drivotrainer. Teacher's Manual. Hartford, Conn.: Aetna Life and Casualty, 1966.

Connecticut State Department of Education. *A Curriculum Guide for Driver and Traffic Safety Education.* Hartford, Conn.: The Department, 1968.

Florida State Department of Education. *Driver Education in Florida Secondary Schools.* Bulletin No. 6. Tallahassee, Fla.: The Department, 1963.

Georgia State Department of Education. *Driver Education.* Atlanta, Ga.: The Department, 1963.

Nebraska State Department of Education. *A Guide for Driver Education in Nebraska High Schools.* Lincoln, Nebr.: The Department, 1967.

New York State Education Department. *Driver Education* (Interim revision). Albany, N.Y.: The Department, 1964.

Pennsylvania Department of Public Instruction. *A Guide to Driver Education and Highway Safety.* Bulletin No. 395, rev. Harrisburg, Pa.: The Department, n.d.

State of Illinois, Department of Public Instruction. *Driver Education for Illinois High Schools.* Circular Series A, No. 116. Springfield, Ill.: The Department, 1963.

State of Utah, Department of Public Instruction. *Driver Education for Utah High Schools.* Salt Lake City, Utah: The Department, 1962.

Teacher's Manual for the Allstate Good Driver Trainer Program. Northbook, Ill.: Allstate Insurance Company, 1967.

Wisconsin Department of Public Instruction. *Wisconsin Curriculum Guide for Driver and Traffic Safety Education.* Madison, Wis.: The Department, 1963.

Approved Textbooks

Following is a list of textbooks approved for use by the Board of Education. All of these texts will be found listed in the 1972 High School

Textbook List published by the New York City Board of Education. No editions on this list have been published earlier than 1965.

American Automobile Association. *Sportsmanlike Driving*. 6th ed. Hightstown, N.J.: McGraw-Hill, 1970. (Teacher's edition available.)

Center for Safety, New York University. *Driver Education and Traffic Safety*. Englewood Cliffs, N.J.: Prentice-Hall, 1967. (Teacher edition available.)

Glenn, H. T. *Youth at the Wheel*. Peoria, Ill.: Bennett, 1965.

Halsey-Kaywood. *Let's Drive Right*. 4th ed. Oakland, N.J.: Scott, Foresman, 1970.

Lauer and Pawlowski. *Tomorrow's Drivers*. Chicago: Lyons and Carnahan, 1967. (Teacher's edition available)

Strasser, and others. *Driver Education*. River Forest, Ill.: Laidlaw, 1969.

Workbooks and Test Material

Center for Safety, New York University. *Achievement Test for Driver Education and Traffic Safety*. Englewood Cliffs, N.J.: Prentice-Hall, 1968.

Center for Safety, New York University. *Section Tests for Driver Education and Traffic Safety*. Englewood Cliffs, N.J.: Prentice-Hall, 1967.

Center for Safety, New York University. *Workbook for Driver Education and Traffic Safety*. Englewood Cliffs, N.J.: Prentice-Hall, 1967.

Esary-Johnson. *Drive Right Workbook*. Oakland, N.J.: Scott, Foresman, 1968.

Glenn, H. T. *Youth at the Wheel Workbook*. Peoria, Ill.: Bennett, 1965.

Mayerhoff-Bishop. *Tests for Let's Drive Right*. Oakland, N.J.: Scott, Foresman, 1968.

Reference and Supplementary Reading

Aaron, J. E., and Strasser, M. K. *Driver and Traffic Safety Education*. New York: Macmillan, 1966.

Byrd, R. A. *Driving to Live*, 2d ed. Bakersfield, Calif.: Pacific Western, n.d.

Ford, R. E. *Your Driving Eye*. Indianapolis, Ind.: Bobbs, Merrill, n.d.

Grant, Bruce. *Know Your Car and How to Drive.* Chicago: Rand, McNally, n.d.

Griffin, Garnet. *Teen-age Safe Driver.* New York: Rosen, 196/.

Hoffman, R. N. *Driver Evaluation.* New York: American Book, 1968.

Hyde, M. O. *Driving Today and Tomorrow.* New York: McGraw-Hill, 1965.

McCluggage, Denise. *Are You a Woman Driver?* New York: Grosset and Dunlap, n.d.

McInroy, E. A. *Driving Safely.* New York: Collier Macmillan, n.d.

National Education Association. *Driver Education and Driving Simulators.* Washington, D.C.: The Association, n.d.

Skillman, T. S. *Road Safety.* New York: McKay, 1966.

Strasser, and others. *When You Take the Wheel.* River Forest, Ill.: Laidlaw, 1959.

Sullivan, Norman. *Learner Driver.* Levittown, N.Y.: Transatlantic, 1963.

Weirs, R. M. *Licensed to Kill.* Philadelphia: Chilton, 1968.

Sources for Films and Filmstrips

Following is a list of sources of Driver Education films and filmstrips with corresponding code numbers. These numbers are used on the Instructional Unit Guide Plan sheets since space there does not permit the listing of names and addresses of suppliers. Note the code numbers on the plan sheets and refer to this list. For example, Code #1 refers to Aetna Life and Casualty Co., Public Relations and Advertising, 151 Farmington Avenue, Hart, Connecticut 06115.

Source	Address	Code Number
Aetna Life & Casualty Co.	151 Farmington Ave. Hartford, Conn. 06115	1
American Automobile Assoc.	1712 G Street, N.W. Washington, D.C. 20006	2

Source	Address	Code Number
American Association of Motor Vehicle Administrators	Barr Bldg. Washington, D.C. 20006	3
American Tel. & Telegraph, Film Division	195 Broadway New York, N. Y. 10007	4
American Trucking Association	1425 16 St., N.W. Washington, D.C. 20036	5
Associated Films	Broad and Elm Sts. Ridgefield, N.J. 07657	6
Association Films	35 West 45 St. New York, N. Y. 10019	7
Automotive Exhaust Research Institute	1220 Keith Bldg. Cleveland, Ohio 44115	8
Bailey Films, Inc.	6509 DeLongpre Ave. Hollywood, Calif. 90028	9
Castle Films	1445 Park Ave. New York, N. Y. 10029	10
Chas. Cahill & Associates, Inc.	5746 Sunset Blvd. Hollywood, Calif. 90028	11
Cheney Bros. Film Laboratories	1420 N. Wilcox Ave. Hollywood, Calif. 90028	12
Chicago Motor Club Safety & Traffic Eng. Dept.	66 E. South St. Chicago, Ill. 60601	13
Cine-Tel Productions	6327 Santa Monica Blvd. Los Angeles, Calif. 90038	14
Citizens Traffic Board of Metropolitan Chicago	20 N. Wacker Drive Chicago, Ill. 60606	15
Coronet Films	65 E. South Water St. Chicago, Ill. 60601	16
Dallas-Jones Productions	1725 N. Wells St. Chicago, Ill. 60614	17
Davis Production Sid Davis	3826 Cochran Ave. Los Angeles, Calif. 90056	18
Education & Information Unit Bureau of Highway Safety Commonwealth of Penna.	Harrisburg, Pa. 17123	19
Ford Motor Company Motion Picture Department	3000 Schaefer Rd. Dearborn, Mich. 48122	20
General Motors Corporation Public Relations Department	General Motors Bldg. Detroit, Mich. 48102	21
Goodyear Tire and Rubber Co.	1144 E. Market St. Akron, Ohio 44305	22
Highway Safety Foundation, Inc.	P.O. Box 1563 Mansfield, Ohio 4901	23
Ideal Pictures Corporation	1010 Church St. Evanston, Ill. 60201	24
Indiana University Audio-Visual Center	1840 East 10th St. Bloomington, Ind. 47405	25
International Film Bureau, Inc.	332 S. Michigan Ave. Chicago, Ill. 60604	26
Jam-Handy Organization	5821 E. Grand Blvd. Detroit, Mich. 48111	27
Kaiser-Frazer Sales Corporation	107 Administration Bldg. Willow Run, Mich. 48197	28

Source	Address	Code Number
Kuns Motor Picture Service	1319 Vine St. Philadelphia, Pa. 19107	29
Lumberman's Mutual Cas. Co. Public Relation Department	Mutual Insurance Bldg. Chicago, Ill. 60640	30
March of Time Forum Films	369 Lexington Ave. New York, N. Y.	31
Metropolitan Life Insurance Co.	One Madison Ave. New York, N. Y. 10010	32
Michigan State University Audio-Visual Center	East Lansing, Mich. 48924	33
Modern Talking Picture Service, Inc.	45 Rockefeller Plaza New York, N. Y. 10020	34
National Association of Auto- motive Mutual Insurance Companies	20 N. Wacker Drive Chicago, Ill. 60606	35
National Committee on Safety Education—National Education Association	1201 16th St., N.W. Washington, D.C. 20006	36
National Dairy Products Corporation	260 Madison Ave. New York, N. Y. 10016	37
National Highway Safety Users Conference	National Press Bldg. Washington, D.C. 20004	38
National Safety Council	425 N. Michigan Ave. Chicago, Ill. 60611	39
National Mutual Insurance Co. Public Relations Department	246 N. High St. Columbus, Ohio 43215	40
New York Good Roads Association	Box 29, State Office Bldg. Sta. Albany, N. Y. 12225	41
North Carolina Dept. of Motor Vehicles—Highway Safety Div. Film Library	Raleigh, N.C. 27611	42
Peter Tartar Raleigh Industries of America, Inc.	1168 Commonwealth Ave. Boston, Mass. 02134	43
Progressive Pictures	6351 Thornhill Drive Oakland, Calif. 94611	44
Safety Education Films	1535 Como Ave. St. Paul 13, Minn. 55108	45
Shell Oil Company Public Relations Department	50 West 50 St. New York, N. Y. 10020	46
Sieberling Rubber Company Public Relations Department	Akron, Ohio 44309	47
Mobil Oil Corporation	150 East 42nd St. New York, N. Y. 10017	48
State of Illinois Film Library Traffic Safety Section	507 State Armory Springfield, Ill. 62706	49
Teaching Film Custodians	25 West 43 St. New York, N. Y. 10018	50
U.S. Bureau of Mines Graphic Services Section	4800 Forbes St. Pittsburgh, Pa. 15213	51
U.S. Office of Education	Washington, D.C. 20201	52
Universal Education & Visual Arts	221 Park Ave. South New York, N. Y. 10003	53
Univ. of Illinois Film Library Div. of University Extension	Champaign, Ill. 61820	54

Source	Address	Code Number
University of North Carolina	Raleigh, N.C. 27611	55
Virginia Polytechnic Institute Motion Picture Unit	Blacksburg, Va. 24061	56
Walt Disney Educational Materials Company	800 Sonora Ave. Glendale, Calif. 91201	57
State of New York, Department of Motor Vehicles, Office of Public Information	504 Central Ave. Albany, N. Y.	58